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# IMPORTANCE OF INTRAPLEURAL PRESSURES AND THEIR MEASUREMENTS IN VARIOUS PATHOLOGICAL CONDITIONS*

## An Experimental and Clinical Study

BY G. KENNETH COONSE, M.D.,‡ OTTO ELMO AUFRANC, A.B.,‡ AND MAURICE COOPER, M.D.‡

THE idea occurred to one of us while teaching x-ray interpretation that alterations in intrathoracic and pulmonic pressures might be responsible for displacement of the mediastinum and its contents in lobar pneumonia. It was further reasoned that this might produce a rather gross disturbance of the pulmonic and systemic circulation. Reference to textbooks of anatomy and physiology were of little help in this respect, as it has previously been considered a fact that the lung accurately follows the chest wall in respiration†. Reasoning on purely mechanical grounds, it seemed logical to assume that in pneumonia where the involved lung was inexpansible and incompressible, the chest wall (on the affected side) would move away from the diseased lung during inspiration, thus creating a high intrapleural negative or diminished pressure. This might conceivably account for the shifting of the mediastinum toward the affected side, so often seen in pneumonia. It seemed logical to assume further that in expiration a positive intrapleural pressure would exist and that direct positive pressure effects might be thus transmitted through the solid lung to the heart and great vessels. To prove the correctness or falsity of these assumptions, a series of experiments was carried out on dogs. Some of the findings are reported in the following preliminary article. A few observations and measurements of the intrapleural pressures in man have been graphically recorded and thus far have been comparable to those found in the experimental animal with similar pathological or alternated mechanical conditions. A brief summary of this phase of the work is given in the last part of the paper. In a later article we intend to include a review of the literature and a more detailed analysis of the experimental and clinical data.

A method of recording both intrapleural pressures simultaneously was made possible by the use of two specifically designed needles. These consist of a modified trocar with openings on either side, through which pressure measurements are recordable when the sharp point of the trocar has been pulled back and a hollow needle thus formed. This protects the lung from injury which might result from contact with the pointed tip of the trocar. The variations of intrapleural pressure are transmitted to a column of mercury in a U tube through a closed system (rubber tubing) originally containing air at atmospheric pressure. The opposite end of the U tube is open and thus constantly in contact with air at atmospheric pressure. The column of air on the latter side of the tube supports a small float with plunger and recording needle attached, operating upon a rotating smoked drum (Fig. 1). The movements of the chest wall are recorded by the usual physiological method. More recently pressure changes within the trachea and bronchi, as well as the venous and arterial pressures, have also been recorded simultaneously with the intrapleural pressures.

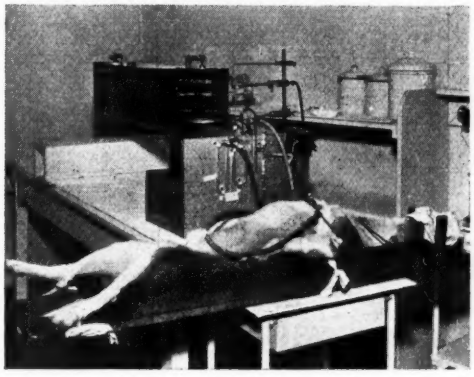

FIG. 1.

Method of recording graphically both intrapleural pressures and the excursion of the chest wall. Note needle in pleural cavity and the mechanism for recording excursions of the chest wall. The actual pressure readings are shown on the smoked drum.

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†A review of the literature has been partially completed, and thus far the observations reported in this paper have only served to clarify many of the discrepancies in experimental work which have previously appeared. It was felt when this work was first undertaken (being purely a mechanical conception) that it should preferably be undertaken as a problem in pure physics and mechanics, i.e., the behavior of gases, liquids, and solids under variations of pressure, etc.

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PRELIMINARY EXPERIMENTS

A series of experiments was first carried out on dogs showing the variations of intrapleural pressure during anesthesia. We were able to establish an average negative intrapleural pressure in dogs under surgical ether anesthesia, of about 1 cm. of mercury in inspiration, and 0 to 2 mm. sub-atmospheric pressure during expiration (Fig. 2). During the excitatory phase there was a striking increase in the negative intrapleural pressure and this was often associated with marked cyanosis and decided changes in the heart rate. The blood pressure was considerably elevated and a rising temperature was frequently noted. As the depth of anesthesia increased the intrapleural pressure always fell (Fig. 2A). We found that if a dog's tongue was allowed to drop backwards in the throat, or a partial obstruction created in any other way, a prompt increase of negative intrapleural pressure occurred and it appeared that this reduced pressure very quickly affected the heart.

We were able to show by x-ray studies that actual dilatation of the heart was produced by means of this mechanism. With severe obstruction, or greatly diminished intrapleural pressures, actual incompetency of the valves resulted and if not relieved promptly, death of the animal quickly ensued. It is our belief that this same mechanism is the cause of many sudden deaths on the operating table during the induction period of anesthesia, i.e., the overaction and reflex muscle spasm resulting in a narrowing of the air inlet passages, partial obstruction, and a fall of intrapleural pressure. We have certain evidence at hand which clearly indicates that this same mechanism is the true cause of thymic death. The effects of alternations of intrapleural pressures on the heart and circulation will be reported in detail in a separate paper.

PRODUCTION OF MECHANICAL PNEUMONIA IN THE DOG

Since the dog is not particularly susceptible to pneumonia, various instruments were devised by one of the authors* by means of which mechanical conditions resembling pneumonia might be produced. The instrument shown in Fig. 3 consists of a long tube with a flexible short end piece. Within this courses a small metal tube which opens into a distensible rubber membrane or bag surrounding the distal end of the instrument. The junction of the two parts of the outer tube is covered with rubber tubing. The instrument can be directed into any desired

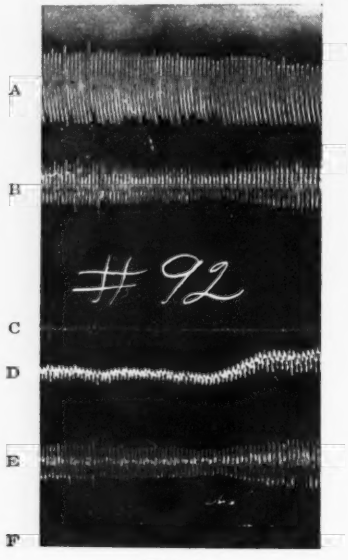


FIG. 2.

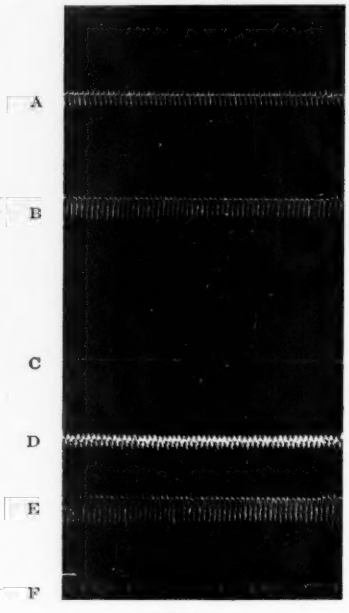


FIG. 2A.

Fig. 2 shows the rise in negative pressure as the depth of anesthesia diminished, i.e., light anesthesia.

Fig. 2A shows diminished intrapleural pressure with deep anesthesia.

A represents the excursions of the chest wall, B and E the variations of intrapleural pressure, C changes in venous pressure, D blood pressure variation, and F marks the intervals of time.

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bronchus and when fluid or air is injected into the bag, the bronchus is sealed off, allowing air to enter only through the tube. Air or fluid can thus be introduced into the area of lung supplied by the given bronchus under controlled conditions.

Opening of the trachea produced a prompt decrease in the intrapleural negative pressures. In many instances the pressure so nearly approximated atmospheric as to be barely recordable. This reduction was quickly followed by an increased heart rate and a fall of blood pressure. The introduction of the instrument into the right or left primary bronchus resulted in prompt changes of the intrapleural pressures (Fig. 4). There was not only a greater negative phase during inspiration on the obstructed side, but also an increase in positive pressure during expiration. A less-marked increase of both negative and positive pressures occurred in the opposite pleural cavity. The mechanism of these pressure changes seemed fairly obvious. Since the partial obstruction of the bronchus results in a smaller volume of air entering the affected lobe during inspiration, a diminished pressure is produced both within the lung and the corresponding intrapleural space. If the pressure was sufficiently diminished the mediastinum would be forced toward the affected side. The remaining muscular forces available would then be utilized in hyperventilating and thus overcoming the elasticity of the normal lung. The diminution of pressure on the normal side is thus probably accounted for by the greater resisting pull offered by the elastic structures within the lung subjected to hyper-ventilation. At the end of inspiration, the sudden cessation of muscular effort results in a prompt rise of the intrapleural pressure as a result of the sudden diminution in size of the intrapleural spaces produced by the fall of the chest wall. This is most marked on the diseased side (due to partial obstruction to outlet of air), but a slight positive pressure is also recorded on the normal side (in this instance probably due to the rebound of Hg column in the U tube).

In order to prove that this was actually occurring, lipiodol was injected into the lower lobe of the lung through the instrument and x-rays were taken (Fig. 5). In inspiration a

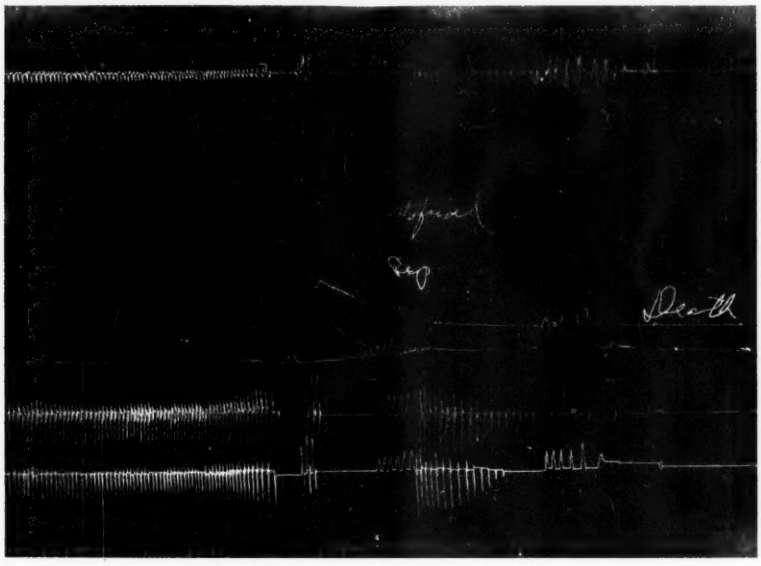


FIG. 2B.

Experiment showing the shift of intrapleural pressure from positive to negative in artificial respiration and its return to normal when spontaneous respiration was resumed.

The upper line represents excursions of the chest wall, the second, blood pressure, third, venous pressure, the fourth and fifth, intrapleural pressures and the lower line the time intervals.

Note how the positive intrapleural pressures are transmitted to both the arterial and venous pressure recording apparatus, this undoubtedly being due to the compression effects exerted directly upon the heart.

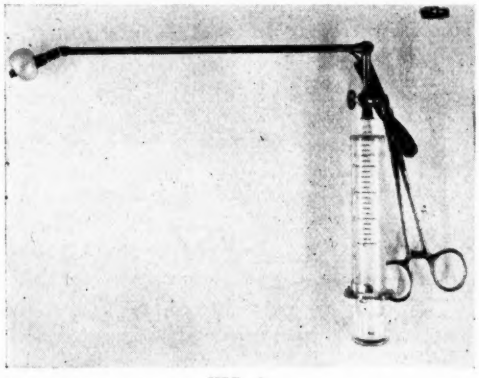

FIG. 3.

The fluid is introduced into the balloon through the small rubber hose which is closed with forceps. Fluid or air may be introduced directly into the lung through the syringe and pet cock as shown.

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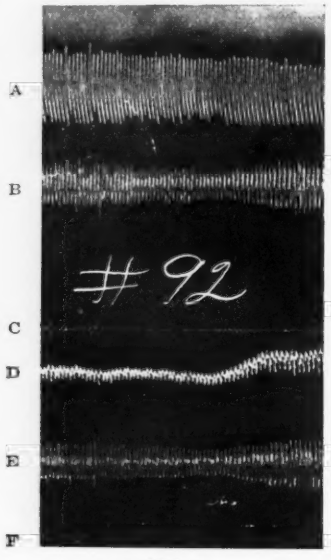


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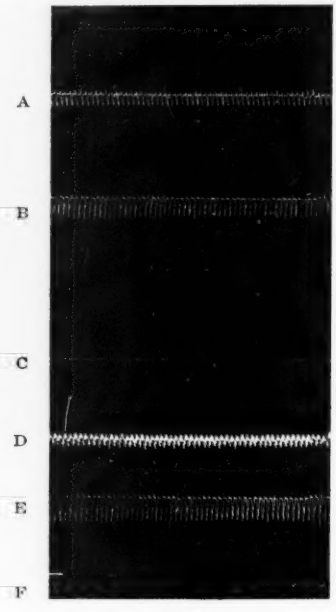


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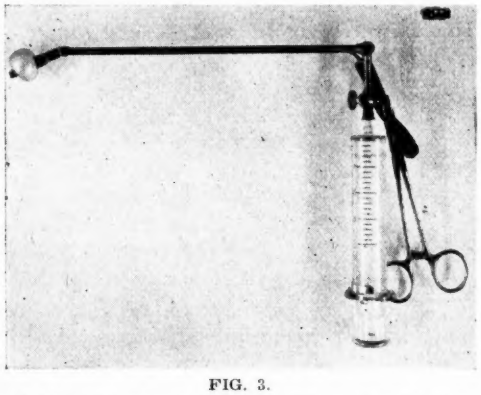

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marked separation of the lung from the chest wall occurred, while in expiration the lung and chest wall were in actual contact. (We have noted the same occurrence in the human in a series of x-ray examinations in which the borders of the lung are discernible at a considerable distance from the edge of the chest wall during inspiration.) Removal of the bronchoscopic instrument has always resulted in a partial reduction of the abnormal pressures.

FIG. 4.

Experiment to show the altered pressures in artificial pneumonia and the beneficial effects of intrapleural fluid.

The upper line again represents excursions of the chest wall, the second line the pressure in the left pleural cavity, the third line pressure in the right pleural cavity, and the fourth or bottom line marks the intervals of time in units of five seconds.

Note that in this case after the injection of 50 c.c. of saline into the right pleural cavity, the intrapleural pressure was changed to practically a normal value. On the left side it required only a little more than 100 c.c. of fluid to produce normal readings.

It is extremely interesting that the excursions of the chest wall were very little changed by the introduction of fluid. This is in marked contradistinction to the use of gases in the pleural cavity where the excursion of the chest wall is tremendously increased.

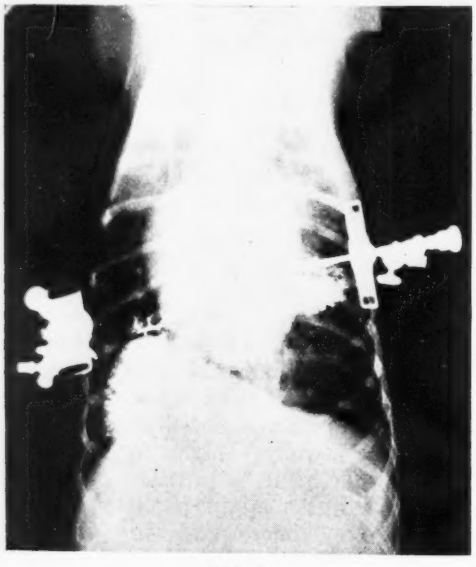

FIG. 5.

X-ray plate of thorax taken in inspiration after the injection of lipiodol and production of artificial pneumonia of the lower lobe.

Note that the chest wall has moved away from the lung. The white shadows are needles used for measuring intrapleural pressures. The outline of the heart is clearly discernible.

At autopsy we were surprised to find in these cases a lung characteristic of lobar pneumonia (Fig. 7). It was red, liver-like in appearance, incompressible, and sank in water. There was also a beginning pneumonic process in the lower lobe of the opposite lung with scattered areas of bronchopneumonia. In a series of additional experiments we have been able to produce changes in the lung, indistinguishable grossly and histologically from broncho- and lobar pneumonia. The chief factors involved are the location and extent of obstruction, the elasticity of the lungs, the atmospheric pressure of the air breathed, the length of time partial obstruction exists, and the thoracic musculature of the experimental animal used. A complete obstruction of any given bronchus has repeatedly re-

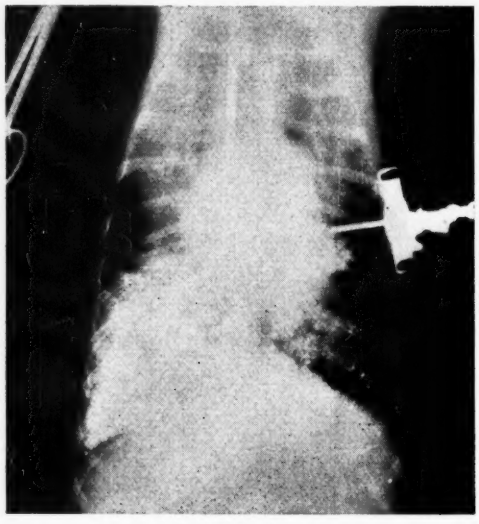

FIG. 6.

Showing same experimental animal as in Fig. 5 with plate taken in expiration. Note how the lung now is against the chest wall. One of the needles had been removed before the roentgenogram was taken.

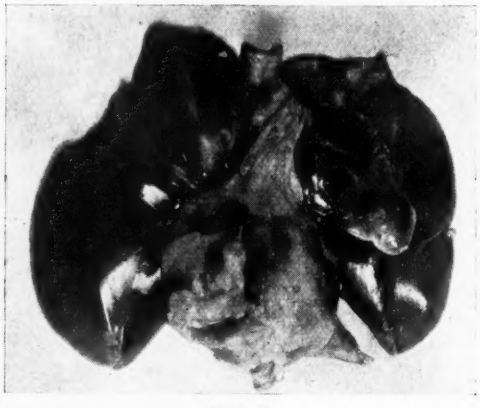

FIG. 7.

This photograph shows lungs, heart, and trachea, removed as a unit. Note the liver-like appearance of the two lower lobes. The smaller lobe lying on the right, when distended is about twice the size of the lower lobe.

This lung showed grossly and histologically a typical lobar pneumonia.

sulted in atelectasis. The mechanism appears to be fairly clear inasmuch as the increased negative pressure in this instance is brought to bear upon the elastic tissue of the lung, and no great distention of the alveoli or inter-alveolar septa and vessels is possible (as no air can enter the obstructed lobe). With a partial obstruction a diminished volume of air enters and leaves the lung area supplied by the affected bronchus. This results in an increased negative pressure during inspiration within the alveolar spaces and consequent separation of the inter-alveolar septa. The distention of the thin-walled capillary vessels, reduced velocity, and consequent increased anoxemia allows the escape of exudate, transudate, or blood into the alveolar spaces. Probably in most instances only a small amount of fluid escapes with each inspiration. Expiration drives out a certain amount of the residual air, more fluid is poured in with each succeeding inspiration, until finally the entire area of lung supplied by the partially obstructed bronchus becomes airless and solidified. Most of our dogs with a short duration of increased negative (diminished) intrapleural pressure and partial obstruction showed beginning or late bronchopneumonia. Those in which two or more hours of satisfactory partial obstruction were maintained showed typical lobar pneumonia. Those that were allowed to come out of anesthesia with a partial obstruction maintained, lived a variable length of time from twenty-four hours to four or five days. These dogs also showed typical lobar pneumonia. We have also noted in these experiments an elevation of temperature up to 105° to 107°F. We are conducting experiments at present to determine, if possible, the exact mechanism by which these changes in temperature are produced. We have been able to vary the temperature almost at will in the experimental animal.

The introduction of fluid into the intrapleural spaces has resulted in a prompt diminution of the increased negative pressures. Surprisingly enough, only a small amount of fluid has been necessary. On the pneumonic side as little as 50 to 100 cc. was effective and on the opposite side about twice this amount was needed.

The first clinical effect noted after the introduction of intrapleural fluid was a decrease in the rapidity of respiration, and an increased excursion of the chest wall. The animal's color almost immediately improved and within ten to twenty minutes cyanosis and dyspnea had practically disappeared. Introduction of fluid not only eliminated the abnormal negative or diminished pressure but also largely eliminated the abnormal positive pressures (Fig. 4).

We have been able to keep a second series of dogs alive and apparently comfortable by the introduction of fluid into both intrapleural spaces. As soon as the fluid had been absorbed, all the original pathological signs and symptoms reappeared but could again be promptly relieved by intrapleural fluid.

It is our belief that pneumonia is produced by partial obstruction of a bronchus and subsequent transudation, exudation, or hemorrhage into the alveolar spaces as a direct result of the increased negative pressure within the alveoli and pleural cavity. The inexpansible and incollapsible area of lung tissue increases the negative and positive pressures within the pleural cavities and these altered pressures (if of sufficient degree and duration) produce serious effects on the heart and circulation, and if unrelieved a serious oxygen lack of the central nervous system. Fluid in the intrapleural spaces apparently causes the pleural surfaces to adhere, thereby eliminating the abnormal negative pressure. This prevents the excessive negative pressure effects on the heart. In a variable period of time the material within the alveolar spaces and bronchus (if not a foreign body) is removed by processes of resolution and absorption and normal function resumed. It is our feeling that mucous plugs or mucus, may often act as the agents creating partial obstruction as we have been able to produce typical pneumonia by the injection of mucus or other fluid, semi-solid, or solid material into a bronchus. It is highly probable that many pneumonias occurring after anesthesia may be accounted for in this way. That various bacteria produce inflammation of the bronchi, narrowing of the lumen, partial obstruction and pneumonia seems altogether reasonable. This may be the true etiological rôle of the pneumococcus in lobar pneumonia.

Experiments have been almost completed concerning the effects produced by the introduction of various gases into the intrapleural spaces in consolidation of the lung. The results thus far have been much less satisfactory than with the use of fluids. Although the negative pressures can be reduced to normal or below, and the positive pressure in expiration practically eliminated, it can often be done only by a tremendous increase in the depth of respiration (when large amounts of gas are introduced into the pleural cavity), since the normal negative or diminished pressure can be maintained only by increasing the excursions of the chest wall (often to an enormous extent) so that the subatmospheric pressure essential for the entrance of air into the lungs during inspiration may be maintained (Fig. 8). The beneficial effects of pleural gases have lasted only a relatively short time due to rapid absorption.

A series of experiments has also been conducted in an effort to determine the most suitable fluid for intrapleural injection and will be made the subject of an additional report.

It has been found possible to elevate and re-

duce the blood pressure to a striking extent in the experimental animal, by varying the intrapleural pressure, and pathological changes have been produced in the dog in slightly less than two months, resembling those seen in long-standing cases of arteriosclerotic hypertension in man.

### MEASUREMENTS OF INTRAPLEURAL PRESSURES IN MAN IN VARIOUS PATHOLOGICAL CONDITIONS

Since the above preliminary report was prepared, additional observations have been made of the bilateral intrapleural pressure in man. Pressure measurements in a left-sided lobar pneumonia showed changes comparable to those found in the dog with an artificial left-sided pneumonia. The introduction of normal saline solution (110 c.c.) into the pleural cavity showing maximum pressure changes, resulted in a prompt clinical improvement. The respirations became less labored and more regular, the cyanosis was largely relieved, and the pulse became of much better volume and quality. As soon as sufficient time had elapsed for the saline to be absorbed (about one and one-half hours in this case) all of the initial abnormal symptoms and signs recurred. Measurements in a second case (right-sided lobar pneumonia) taken late in the course of the disease, showed the presence of both an abnormally diminished pressure on inspiration and an increased positive pressure on expiration in both pleural cavities; the changes, however, were most marked on the affected or diseased side. (These pressure changes have been of such constancy in the experimental animal that it has been possible to predict with certainty the presence of early pneumonia long before density changes are evident in x-ray studies.)

The intrapleural pressures have been measured and recorded graphically in two cases of pulmonary tuberculosis. In one of these the pressure was found to be excessively low on the left side and also apparently somewhat below normal on the right. From these observations we predicted the probable presence of extensive adhesions between the left lung and chest wall. No attempt was made in this case to introduce fluid or treat the patient, due to her poor general condition and the mechanical conditions present, i.e., adhesions. This patient died two weeks later from cancer of the stomach. Autopsy revealed extremely dense adhesions between the left lung and chest wall involving about two-thirds of the left thoracic cavity.

In a second case of pulmonary tuberculosis the pressure in both pleural cavities was recorded graphically and tracings revealed pressures much less negative than normal. This patient had been having occasional pulmonary hemorrhages for three successive days. A litre of fluid was introduced into the right pleural cavity, the objective being to diminish or eliminate the excursions of the chest wall and diaphragm on the affected side and thus internally splint the lung. It was reasoned that the fluid would serve to maintain a partial collapse of the lung and possibly exert sufficient hydrostatic pressure to check the pulmonary hemorrhage. It was found that this method allowed partial collapse of the lung, but maintained a diminished pleural pressure above the fluid level. The patient suffered no untoward effects and no further pulmonary hemorrhages occurred. The intensity and frequency of her cough was greatly diminished and the abnormal elevation in afternoon temperature was undergoing a gradual decline on her discharge from the hospital ten days later. We cannot as yet express an opinion as to the end result in this case but it at least suggests a possible method of checking pulmonary hemorrhage.

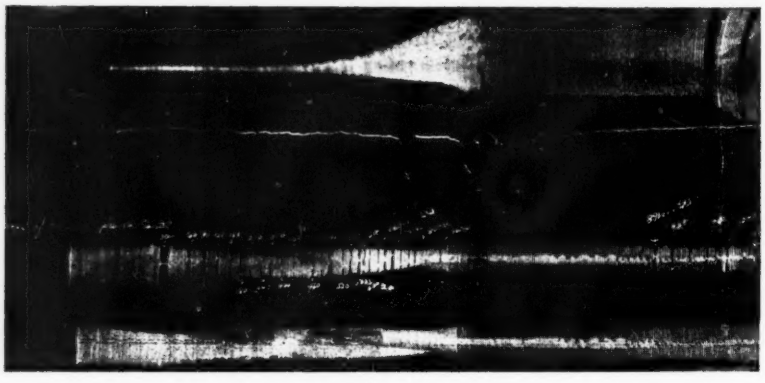

FIG. 8.

Experiment showing the effect of air introduction into the right pleural cavity in right-sided pneumonia.

The upper line represents the excursions of the chest wall, the second line, blood pressure changes, and the two lower lines the intrapleural pressures. The interruptions in the continuity of the upper intrapleural pressure tracing mark the point where air was introduced into the pleural cavity.

It should be particularly noted how the excursions of the chest wall increased as the amount of air in the pleural cavity became greater. A total of 1200 c.c. of air was introduced before death from cardiac failure occurred.

The fluid not only serves to compress the affected lung but also largely eliminates pressure changes in the lung and the corresponding intrapleural space. The weight of liquid serves to hold down the diaphragm to such an extent that elevation in expiration becomes practically impossible in either the standing or sitting position. Movements of the chest wall are also largely eliminated, the fluid (if present in moderate amount) serving much as a shock absorber, or buffer. It can be pushed up along the surfaces of the lung during expiration and gravitates downward during inspiration. If the pleural cavity be completely or nearly filled, serious pressure effects may be exerted upon the mediastinum and its contents and marked displacement toward the normal side produced.

Graphic records of the intrapleural pressures in a case of long-standing heart disease (male of seventy-five with associated auricular fibrillation, general anasarca, and breathing of Cheyne-Stokes type) showed an abnormally diminished pressure on inspiration and an increased positive pressure on expiration. The pressure changes varied directly with the depth of respiration. The introduction of 150 cc. of normal saline into both pleural cavities produced but little improvement in his general condition. Breathing and pulse became somewhat more regular but the abnormal pressure changes still persisted within the pleural cavities. This improvement was of short duration, however, and the following day the patient died. Autopsy showed marked edema of both lung bases with about 200 cc. of pleural fluid in each cavity. The other pathological findings were those of chronic passive congestion.

In a second case of acute cardiac failure, following operation, with a systolic blood pressure of 70 mm. and a diastolic pressure of 30 mm., the introduction of 200 cc. of sterile olive oil into each pleural cavity resulted in a prompt return of blood pressure to 110 mm. systolic and 78 mm. diastolic. Cheyne-Stokes type of respiration disappeared, and a previously fibrillating heart became suddenly regular. The color and general condition of the patient were almost immediately improved and from a semi-stuporous condition he became cognizant of his surroundings, responsive, and rational. In this case a bilateral subcutaneous emphysema later developed (we believe as a result of excessive coughing from a chronic bronchitis and the relative inelasticity of the lungs in a man of this age). This did not, however, cause the patient any discomfort nor prove a serious complication. In this particular case, bilateral intrapleural puncture was done three separate times and fluid injected into the pleural cavities.

Thus far in a small series of cases we have encountered no other untoward effects. It has been possible to carry out the entire procedure in all cases under novocaine anesthesia and with practically no discomfort to the patient.

## SUMMARY

1. In a series of experiments on dogs, graphic measurements have been made of the variations in the pleural pressures in certain pathological and mechanical conditions. It has been noted that intrapleural negative pressure is raised during the excitatory phase or during light anesthesia, and greatly diminished in deep anesthesia.

2. Obstruction of the trachea, no matter how produced, i.e., from within or without, results in a prompt increase of the negative intrapleural pressure and if of sufficient degree, causes an increased filling of the heart, dilatation, cyanosis, rising blood pressure, changes in the heart rate, anoxemia of all tissues, and if unrelieved, death.

3. Both lobar and bronchopneumonia have been produced in the experimental animal in any desired portion of the lung by partial obstruction of the bronchus leading thereto. Such partial obstruction can be diagnosed with certainty from the graphic record of the intrapleural pressures, i.e., consolidation is shown by an abnormally diminished pressure on inspiration on the affected side and an abnormal increase in positive pressure in expiration.

4. The introduction of intrapleural fluid has resulted in a prompt diminution of the increased negative pressure appearing in inspiration, and a fall of the abnormal pressure in expiration to approximately normal levels. Clinically the dogs have shown a rapid improvement in general condition with disappearance of cyanosis, fall in temperature, and less labored respiration.

5. In a small series of observations in man, the same abnormal pressure changes have been observed as those found in the experimental animal with comparable conditions.

6. It seems fair to assume that the graphic measurement of intrapleural pressures in man may be of considerable diagnostic value in diseases of the heart, circulation, and lungs.

7. The injection of intrapleural fluid in man is suggested as a new method of treating various diseases of the heart and lungs.

# SOME NEWER TRENDS IN PSYCHIATRY*

BY KENNETH J. TILLOTSON, M.D.†

THROUGH sheer necessity there always have been certain community ways, and eventually actual community facilities and methods, for the care of outstanding mental disorders, when it has grown beyond the capacity of the individual and the family to meet both the emergencies and the protracted developments involved; and with the growth of our communities and their increased complexity, there naturally has also arisen the question of the best means of organizing the resources for treatment and, finally, prevention. Therewith there has been a gradual development and a new orientation in dealing with disease, i.e., the attitude of modern psychiatry, a transformation of a relatively static attitude of mere mending into a vision and a practice of more attention to better health and happiness for the rank and file. This is the turn from charity with custodial care and treatment in asylums and retreats to the spirit of modern psychiatry, which is concerned with the problems of keeping people well and affording them opportunities to do so, and with restoring those who have failed to make satisfactory adjustments to life.

Sometimes it is a discovery, or some special achievement, that activates progress in the realm of medicine, such as the discovery of insulin or liver therapy in the primary anemias. Sometimes it is more a change in general philosophy and in the goal that creates a new spirit of enterprise, or it is largely one or another type of personality that impresses a new stamp on the attitude and policies and mobilization of persons disposed to muster the available opportunities—either a movement largely of optimists and opportunists toward what we might expect of an exuberant temperament, or a movement of a more steady and systematic growth and construction. All these factors have contributed to the evolution of psychiatry in its present-day trends, and it is no longer surprising that there is a growing interest in prevention, increased facilities for better care and treatment, together with an active desire for further research studies among those laboring with the mentally ill, as well as among the general physicians or specialists in other branches of medicine who formerly would not have thought of connecting psychiatry with the concerns of the average life.

In speaking of psychiatry I am using the term in its broad sense and with the connotation that it should have. Under such a heading should be included all that is concerned with mental disorder, whether it is psychoneurotic or psychotic in nature, whether it is regarded as functional in origin or founded upon some somatic and organic derangement. This point is stressed at the outset because it is highly important, when such a progressive movement as out-patient clinics in mental medicine are being developed, that psychotherapy should not be considered as something apart and distinct from the wider aspects of psychiatry as a whole; nor does it differ materially from the problems we now see on the acute services of our psychiatric wards. The problems that beset the physician in such circumstances are all-embracing. They range from the simplest maladaptations to situations and environment to the most intricate psychotic conditions where manifold factors of body and mind take their part.

For many years we psychiatrists have been too much isolated in the mental hospital and secluded from other branches of medical practice. Because of this, there is no doubt that psychiatry has lost valuable opportunities, not only in the development of itself as a science, but in point of the application of psychiatry to general medical problems. It is a question if our research work has not been too restricted in its scope, in the past, and much time has been spent, perhaps somewhat unprofitably, in merely adding up symptoms and making diagnoses. But now, in addition, we devote more time to the problems of the patient and to the task of actually aiding him in adjustment and in the task of reintegration, which is the actual medical problem that, in a great many cases, can be relieved by an adequate therapeutic approach. It is believed that the effective reintegration of certain psychoses will take place more satisfactorily if the approach is made as early as possible; hence, the great opportunity in preventive psychiatry that the pediatricians are giving us in child guidance work. These challenges which pediatricians and other medical departments or specialties offer us indicate a new trend in medicine, and must lead to newer trends in psychiatry.

In most instances, psychiatry can offer very few specific data, but it does offer a great deal in methods of approach, in a different point of view, and in the formulation of the problem as a whole. This contribution of psychiatry to the general medical problem, in close coöperation with internist, pediatrician, and other special branches of medicine, means a more thorough study and analysis and offers more to the patient in the form of treatment. Psychiatry makes no more definite promise than any other department of medicine. We are anxious to study the

*Read before the Boston Society of Psychiatry and Neurology, March 17, 1932.

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various problems with other departments of medicine in the general hospital or in the psychiatric hospital. Through this method of team work there are great possibilities for the future practice of psychiatry as well as for medicine in general.

Hitherto the workers in the field of mental medicine have been far too departmental and we must look forward to the time when their breadth of knowledge and viewpoint will be considerably widened. It is, perhaps, somewhat appalling to contemplate how extensive the education and experience of a well-equipped psychiatrist should be. Though it is true that in many circumstances his personality is of great moment, it is in the out-patient clinic that it becomes of paramount importance. Here, as well as in the busy psychiatric service where the time factor is a matter of special consequence, the capacity to get on good rapport with the patient so that he, encouraged to unburden himself, will speak freely of symptoms and inner life, is an asset that no amount of training can achieve. It is probable, though, that in the majority of instances the youthful medical practitioner who adopts this branch of medicine will do so mainly through an inherent interest in the subject, and provided that he is not unduly educated toward a purely materialistic basis of mental ills, he will tend naturally to develop that sympathetic and understanding attitude which is so essential to his future work. The psychoanalytic school would certainly suggest that such a choice of a career was by no means accidental, and that the growth of the psychotherapist was assumed through unconscious factors related to possible disharmonies within himself.

While there is plenty of evidence of certain general trends with many local crystallizations, one sometimes notes almost revolutionary changes side by side in modern psychiatry. With evidence of steady growth by continuity and evolution, however, a strange mixture of humanitarian, fiscal and medical factors have shaped tendencies of almost kaleidoscopic variety, carrying simultaneous evidence of almost archaic tradition, such as an obligatory jury trial for "insanity" (for admission to state hospitals), and most advanced ambitions for work (at the root) with almost utopian promises of prevention.

Psychiatry, during the last century, has passed through different epochs. During the late war great advances were made, chiefly in the new emphasis and importance placed upon this subject, together with fresh and widespread interest and demands. Further investigations were stimulated and an earnest desire for a more exact understanding of the psychodynamics of the psychoses is demanded in our modern mental hospital work. This has led to a greater amount of organized research and to more adequate and better hospital facilities for the care and treatment of mental illnesses.

There has been a reluctance on the part of the general medical practitioners and many specialists to accept psychiatry, believing that it was not scientific. There are plenty of physicians who are rather too fond of describing medicine as an art rather than a science. Let us see what department of medicine a recent president of the American Medical Association stated was truly scientific when he wrote his presidential address on "The Art of Medicine," in 1927: "But medicine can be a science. Psychology and psychiatry can enable the intelligent physician to understand these varied unique individuals, his patients, in a scientific way."

In an article entitled "Mental Hygiene and the Practice of Medicine," Strecker[2] states that "it is useless to deny that in the mind of many general practitioners there exists a very wide gap between the problems of psychiatry and their own direct daily medical interests. It is not an over-statement to say that fully fifty per cent of the problems of the acute stages of an illness, and seventy-five per cent of the difficulties of convalescence, have their primary origin not in the body, but in the mind of the patient.

"Psychiatry has methods to impart that will make it possible and feasible to recognize and handle this factor. A tremendous gain in every direction will be sure to result if internists will appreciate the psychopathology of the patient and his illness, and treat it as energetically as they do his dangerously high fever or his circulatory collapse.

"It is unfortunate that there is not more real understanding of the therapeutic methods of psychiatry. Either they are thought to be mysterious and almost occult, or else it is assumed that actual treatment does not exist, and the patient gets well or worse without let or hindrance from the physician."

While it does not fall within the scope of this paper to enter into a controversy with Dr. Strecker, the writer would like to point out that the newer developments in psychiatry must be optimistic, but we feel that there is definite harm done in over-stating what the psychiatrist can actually add to general medical problems or even to his own specialized psychiatric problems. It is possible that, in the general hospital and in general practice, the psychiatrist may, to an appreciable extent, aid in a considerable number of cases, but there has been too much emphasis placed upon the mental hygiene attitude of promising that which neither psychiatry nor any other branch of medicine can do in terms of cures and prevention, in a vast number of impossible medical conditions. Psychiatry, in its present-day methodology, is quite new and it has a long distance to travel before it can really establish itself as capable of extending its services over too broad a field.

At the McLean Hospital we are now dealing with a larger number of acute recoverable psychotic cases, together with an increasing number of psychoneurotic patients. In handling a larger number of cases showing the more acute affective reaction type of psychoses, the function of the hospital has been materially widened in scope. This has meant increasing the staff and personnel in existing departments in order to give the individual patient more intensive treatment. It has also meant enlarging existing departments, and the addition of new equipment such as hydrotherapy, occupational therapy, and the installation of a new x-ray department and a new dental suite, together with the increase of other laboratory facilities. It seems to us that the function of the modern mental hospital is primarily to cure or restore, as completely as possible, the patients received for treatment, and the success of any mental hospital is necessarily dependent upon the attention given to the individual patient intrusted to its care.

To be sure, the mental hospital has certain other accessory functions to perform, such as the education of medical students, nurses, and other personnel, together with the establishment of mental hygiene and child guidance clinics, and the carrying on of a proper amount of research work, but the immediate value of the care and treatment given in any hospital must be evaluated in terms of what is accomplished for the individual patient.

In recent years the influx of patients into mental hospitals and the consequent crowding and enlargement of many institutions have, in many cases, neutralized the advantages that have been made in clinical standards and methods, so that in dealing with a large number of acute cases it has been necessary to make these additions in equipment, as well as in staff and personnel, in order to prevent what has been spoken of as a "depersonalization" of the individual and a submergence in crowded conditions and crowd management, which has too long been the case in many mental hospitals. One of the outstanding developments, during the past two years, has been the establishment of a psychiatric clinic in the Massachusetts General Hospital. In addition to the work done by a clinic of this type in a crowded metropolitan district, the character of which you are all familiar with, we have the responsibility of introducing psychiatry into the general hospital on a larger scale. This leads to the early recognition and diagnosis of mental illnesses and places at the disposal of the internist and surgeon the services of the psychiatrist, and, since the Massachusetts General Hospital is a large teaching center, it is apparent that medical students will learn about the general medical aspects of psychiatry during their courses there. In fact, we are at the present time developing a more formal method of presenting to small groups of students who are studying medicine under Dr. Means at the General Hospital a course in the psychiatric aspects of general hospital patients with special reference to the symptomatic psychoses and psychoneuroses. This work is being formulated under the direction of Professor Campbell.

It is evident that psychiatry must, in the future, have an important place in medical education and in medical practice. It is now recognized that 40 per cent of the patients in general practice present psychiatric problems in various proportions. Sixty per cent of the patients who consult physicians for heart disturbances and for gastrointestinal complaints are said to present problems of this character. The general hospital wards and out-patient departments offer plenty of material that can be developed for psychiatric teaching. It should be realized also that psychiatry is the strong framework of mental hygiene. It is now recognized that preventive medicine is inseparably linked with and dependent for its progress on clinical medicine. This is correspondingly true of psychiatry and preventive psychiatry, which constitute the most substantial part of mental hygiene.

To make headway in psychiatry, therefore, efforts must be made to advance the service and educational and training standards of the psychiatric hospital, which must be looked to as the most important resources in shaping all psychiatric developments.

The mental out-patient clinic should prove an important step in a progressive hygiene movement. By its means it is hoped that a very large suffering section of the community will be rendered more effective and happier citizens. The social loss brought about by neurotic disability must be far heavier than is ordinarily supposed. We often tend to talk very glibly about the prevention of mental disease, but, at present, we have quite insufficient criteria to go upon before we can make any claim that out-patient clinics will appreciably affect the incidence of psychotic disease. It may be said that its root causes are more biological and social than individual. Nevertheless, any aid toward healthy adjustment to life's problems is to be sought for. The education of the public in all that appertains to them will do incalculable good, and the out-patient clinic should constitute an excellent nucleus to that end.

It has been much a matter of debate whether the development of such clinics should be independent or in connection with general neurological or general hospital services within the general hospital. There is a good deal to be said in favor of each point of view, but it is not within the scope of this paper to detail these points. It is our opinion, however, that a psychiatric clinic will prove more useful and will meet the general needs more effectively if it is integrated into the out-patient department and general hospital organization in very close union with

neurology and internal medicine. The child guidance work should be closely related to the pediatric service, as we have found these departments especially helpful and coöperative in our development. The great factor in such an arrangement is the ample opportunity for team work and a more intimate coöperation with medicine and surgery. Psychological medicine or psychiatry must not stand out as an isolated department of knowledge. Were it not for the inevitable question of finance all other difficulties would soon be swept away.

The bringing together of psychiatry and other branches of medicine has been accomplished through the operation of the psychiatric clinic in the Massachusetts General Hospital. This also places within our reach in the mental hospital the leading medical and surgical consultants, some of whom visit the McLean Hospital regularly and examine all patients admitted. This, in turn, is bringing into the study of psychiatric patients a thoroughness, from the standpoint of modern medicine and surgery as well as from the standpoint of the biochemist and physiologist, which must continue in its development. We believe that the spirit of research should not necessarily be confined to the laboratory worker. Throughout the Hospital, in the various departments, the attitude of gaining more knowledge and of more intelligently serving the patient, as well as finding out more about the nature of the illness from which the patient is suffering, has been encouraged.

During the past year the clinical approach to the patient has been carefully studied, and the attitude that is being stressed most at the present time is that of a therapeutic approach. This involves a thorough investigation of the patient's early development, personality and character trends. Emphasis is being placed upon the family inter-relationships. With this end in view, the adoption of a standard anamnesis form, which allows within its frame a moderate amount of latitude to fit each individual case, has been found of value.

The organization of clinical ward rounds has brought the staff as a whole into closer contact with the various psychiatric problems presented by the patients. The thorough discussion of special psychiatric aspects of the individual case is the primary aim of our staff conferences.

A problem that has always been a doubtful one in the mind of the psychiatrist is the mental content of the patient and its relationship to the general course of the psychosis. The study of the recovery process in real recovery and in remissions has been attempted with interesting results. Since one cannot study a patient who is developing a psychosis, as a rule, we have been interested to study patients' mental content in the psychosis and as they emerge from the psychosis. It has been alleged in the past that the mental content in the psychotic patient is a trivial matter of secondary importance. This is not in accordance with our experience and observation. From the purely research angle, there are problems of interest in this connection.

Our resident roentgenologist is interested in the special x-ray study of our patients, with therapeutic possibilities kept in the foreground. Several problems have presented themselves in the manic-depressive groups, and are being worked on by one or more members of the staff. A psychoanalytical approach to the schizophrenias is a real problem that is still being debated. The affective reintegration of the schizophrenic is a task which offers a great challenge and since McLean Hospital offers peculiarly valuable advantages for studying schizophrenic patients psychoanalytically, this problem has been approached, and a study of a few patients, from the psychoanalytical point of view, is being made at the present time with some very interesting developments.

On our hospital staff we have attempted to get personnel with a wide range of experience and diversification of opinion. We have the organicists and the functionalists, biochemists and psychologists, the Kraepelinians and the Freudians, as well as the adherents of Bleuler, Meyer and others. It is necessary that all these opinions should be carefully considered and judiciously applied to meet the individual patient's needs.

In our personality studies, we are attempting to investigate the individual as a whole and to avoid a one-sidedness, which a strict adherence to any particular school might naturally provoke, even in its widest application to the main aspects of human behavior.

Thus, although Freud and his school acknowledge the importance of the constitutional aspect of human life, no attention is paid to it, and their teaching is practically a teaching of pathological psychology. Different types of one-sidedness are brought out by the following example: Consider fatigue. The psychologist would regard it as a certain constellation of feeling and tendencies; the physiologist would think of it in metabolic terms; in the psychoanalytic literature you most frequently find it mentioned as a defensive mechanism.

In the brilliant work of Pavlow, there is little place for volitional mental processes. An attempt at consideration of these various aspects from a totality viewpoint has been made by Adolph Meyer, in what he calls psychobiology. Whether you are dealing with this school or that school, the important fact is that there is a marked tendency to look for totality and continuation, in contrast to what the tendency previously has been.

One tries to find out the reason for a person's reaction to a situation on the basis of the person's different tendencies, these being assets

or liabilities as compared with the situation he is up against. We try to find out why he takes this particular attitude to the situation by studying his past life, his environment, and what has happened to him mentally and physically that may have made him take this attitude. We must go back to family and racial traits, etc. We no longer satisfy ourselves by regarding an individual's acts as peculiar, incomprehensible incidents, but link them up with past and future.

Intensive therapy with the individual patient is the most effective treatment known at the present time. Psychiatry, in the future, must develop along these lines.

Modern clinical psychiatry is becoming more firmly grounded through the support of the auxiliary medical sciences. The clinic and the mental hospital must be institutions for instruction and investigation and for this task it must combine optimism and a maximum of possibilities. If that is the case, then the clinical physician will be able to work more and more fruitfully in the practical science of applied psychiatry.

Thus, to summarize our developments in accordance with the trends of modern psychiatry, the problems of the intensive individual treatment and the large aggregation of patients in hospitals for mental disorders has, in recent years, assumed larger proportions than ever. Although hospital facilities inherited from a less enlightened period than the present are inadequate in type and extent and add greatly to the difficulty of individual treatment, lines of progress already established indicate better provisions for such treatment through improvements in organization together with increased staff and personnel and coöperation with the general hospital. Thorough examination and study of patients as they are admitted to the hospital, from the standpoint of a careful and complete medical study, as well as from the psychiatric viewpoint, the preparation of a complete history, and early staff conferences on cases are necessary as a foundation for an adequate understanding and treatment of the individual patient in the various departments of the hospital. Preparation for special forms of physical and mental treatment and the establishment of suitable equipment and organized departments for general medical and surgical attention and for special therapeutic measures are resources of great value in individual treatment. Courses of instruction and training for the members of the nursing organization and the employment of trained therapists in occupational, physical and recreational therapeutic measures, are contributing greatly to the standards of personal treatment.

The general hospital out-patient clinic adds to the general hospital an active agent of psychiatric service to the community which should increase the hospital's value in the field of preventive medicine. These developments are opening the way to more precisely organized plans of treatment for individual patients through coöperative methods in which the physician is able to use more effectively the more intelligent and well-trained nurses, special therapists, and psychiatric social service workers that are being added, so that the modern mental hospital should be a combination of specialized and general hospital facilities for observation and treatment, study and research.

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3 Anthonisen, N.: Lectures in Psychiatry. (Unpublished.)
4 Read, C. S.: Out-patient psychiatry. Lancet 2:1438 (Dec. 26) 1931.

## THE BIRTH RATE IN FRANCE

It is anticipated that the French Legislature of this season will be confronted by an unprecedented array of legal projects all calculated to arrest the discouraging drop in the French birth rate. This seems to have been brought about by the expense of marital relations, medical, psychological, woman's emancipation and other changes which are taking place in the body politic.

A pamphlet issued by Fernand Boverat of the Birth Rate Council gives his opinion that a "nation which cannot show an average of three births per family is doomed to extinction". One of the revelations of Boverat's figures is that, while births in French families have steadily declined since 1868, those in foreign families domiciled in France have increased. In 1868 the number of children born in France was 1,034,000 including 10,000 foreigners. The total in 1930 was 748,000 of whom 55,000 were foreign. Although the average number of births was four to the marriage in 1831, a century later it was only 2.2.

## TUBERCULOSIS WORK

It has been reported to the New York Tuberculosis and Health Association that four out of ten persons afflicted with tuberculosis who have applied for diagnosis have allowed the disease to progress so far that they have gone beyond the curable stage. This appears in the Association's annual report just published. Special emphasis is given to the fact that women and young children apparently shorten their rations in order to keep the babies well fed and thereby lower their resistance to the ever present germ.

# The Massachusetts Medical Society

## PROCEEDINGS OF THE SOCIETY

*First Day, June 8, 1932*

THE one hundred and fifty-first anniversary was observed in the Hotel Statler, Boston, Wednesday, Thursday and Friday, June 8, 9 and 10, 1932. Registration was begun in the hotel on Wednesday morning, there being on exhibition there displays by 34 exhibitors and also scientific exhibits. There were medical and surgical clinics at the Boston City Hospital by members of the staff during the morning followed by a courtesy luncheon by the trustees of the hospital to those who were present, a large number. At 11:30 o'clock the Supervising Censors met in the Ball Room of the hotel, eleven Districts being represented. The plan of examination of candidates for fellowship was discussed and a committee to prepare examination papers was appointed. At noon the Council met in the same room with 193 Councilors present, the largest number in the history of the society. (See Proceedings of the Council*.) During the afternoon there were talking moving pictures in the Ball Room and a scientific exhibit on arthritis by Dr. R. B. Osgood and his associates. In the evening Dr. Frank B. Mallory, Professor of Pathology, Harvard Medical School, gave the Shattuck Lecture in the Ball Room with the subject, Cirrhosis of the Liver. (See *New England Journal of Medicine*, issue of June 16, 1932, pages 1232-1239.) There was an attendance of about 400 and refreshments were served after the lecture.

*Second Day, June 9, 1932*

During the morning the Sections of Medicine and of Radiology and Physiotherapy held their meetings in the hotel, according to the official program. At 12:30 noon the Annual Meeting of the Massachusetts Medical Society was called to order by the President in the Ball Room, the attendance being about 50 persons. The minutes of the last meeting were read by the Secretary and adopted by vote. The Secretary read the following statistics as to the membership of the society.

| | | |
|---|---|---|
| Membership of the Society, June 10, 1931 | | 4697 |
| *Lost by* | | |
| Death | 70 | |
| Resignation | 24 | |
| Deprivation (a and b) | 26 | |
| Deprivation (c) | 1 | |
| Total loss | 121 | |
| Deducted from above | | 121 |
| Leaves | | 4576 |
| *Gained by* | | |
| New Fellows | 203 | |
| Restored by Council | 4 | |
| Total gain | 207 | |
| Added to above | | 207 |
| Membership of Society, June 9, 1932 | | 4783 |

The Chair introduced delegates from other New England state medical societies. Dr. D. M. Stuart, of South Paris, Maine brought the greetings of the Maine Medical Association and invited the Fellows to attend the meeting of his society at Rangeley, the following week. Dr. Chester F. McGill of Portsmouth, N. H., said he was glad to be present and help cement the existing friendly relations between New Hampshire and Massachusetts and Dr. Earl J. Mathewson of Pawtucket, R. I., brought good wishes from the sister state of Rhode Island.

T. J. O'Brien, Suffolk, presented the following amendment to Chapter VII, of the By-Laws, as amended at the Council meeting on the previous day, and printed in the call for the meeting:

*Moved*, that the Committee on Permanent Home of the Massachusetts Medical Society be made a standing committee and that an amendment to the By-Laws relating thereto be submitted to the Massachusetts Medical Society to be acted on at the annual meeting of the said Society, the said amendment to read as follows:

Chapter VII, Section 9. The Committee on Permanent Home shall consist of five Fellows. It shall act for the Society in all matters pertaining to the financial and mechanical arrangements (of a temporary or permanent nature) necessary to secure and maintain adequate accommodations for the officers, employees and departments of the Society, subject to the approval of the Council.

It shall devise and execute plans for the raising of funds to be added to those which have been or may be acquired for the purpose of providing temporary or permanent accommodations for the Society.

All bills incurred shall be countersigned by the Chairman and forwarded to the President for his approval.

The Committee shall make a report of its doings to the Council including the condition of the fund for a home for the Society at the annual meeting of the Council.

The above motion having been duly seconded was adopted by unanimous vote.

Under the provisions of Chapter I, Section 1, of the By-Laws, namely: "He (the president) shall make appointments to fill vacancies *ad interim* in any of the offices of the society," the President appointed the following Standing

*Page 1343, issue of June 30, 1932.

Committee on Permanent Home: T. J. O'Brien, *Chairman*, S. B. Woodward, C. G. Mixter, J. M. Birnie, R. B. Greenough.

The Chair read the amendment to the Malpractice Act, offered by F. G. Balch to the Council on the previous day and approved by that body by unanimous vote, namely that the words: "and were at the time of the alleged malpractice," be inserted after the word: "society" in the fifth line of the article called: "*First*" in the Malpractice Act as printed on page 28 of the official pamphlet of the society published in the year 1928, namely: the Digest, By-Laws, Code of Ethics and Malpractice Act. The motion that this amendment be adopted having been put and duly seconded was passed without dissent. There being no further business the meeting adjourned at 1:10 p. m.

Thursday afternoon the Sections of Obstetrics and Gynecology and of Tuberculosis held their meetings in the hotel.

In the evening the Annual Dinner was served in the Ball Room to 183 Fellows and guests. The Rev. Arthur P. Pratt of Greenfield delivered the invocation and speeches were made by Dr. Dean Lewis, President-Elect of the American Medical Association and Professor of Surgery at the Johns Hopkins University, by Dr. J. M. Baker and Dr. Felix J. Underwood, health commissioners of the states of Alabama and Mississippi, respectively, by Dr. Charles F. Wilinsky, Deputy Commissioner of Health of the City of Boston, by Mr. Joseph A. Parks, the new chairman of the Massachusetts Industrial Accident Board, by Mr. Robert G. Dodge, counsel of the society, by Mr. G. R. Girdlestone, of the Royal College of Surgeons, England and by the Rev. Arthur P. Pratt.

### *Third Day, June 10, 1932*

Friday morning the Sections of Surgery and of Tuberculosis had their meetings in the hotel. At 12:30 o'clock the President introduced the Orator, Samuel B. Woodward of Worcester to a large audience in the Ball Room. He delivered the Annual Discourse with the title: The Story of Smallpox in Massachusetts. (See *New England Journal of Medicine*, June 9, 1932, pages 1181-1191.) The address was greeted by prolonged applause at its close and those in attendance partook of a luncheon which ended the annual meeting.

The total registered attendance was 1088 and the attendance at each of the meetings and the officers elected by the Sections for the year 1932-1933 follow:

SECTION OF MEDICINE. Attendance, 210.

Officers for 1933:
James H. Means, *Chairman*
Hermann L. Blumgart, Boston, *Secretary*

SECTION OF SURGERY: Attendance, 230.

Officers for 1933:
Allen G. Rice, Springfield, *Chairman*
Ernest M. Daland, Boston, *Secretary*

SECTION OF TUBERCULOSIS: Attendance, 75.

Officers for 1933:
Roy Morgan, Westfield, *Chairman*
Donald S. King, Boston, *Secretary*

SECTION OF PEDIATRICS. Attendance, 90.

Officers for 1933:
Edward S. O'Keefe, Lynn, *Chairman*
Joseph Garland, Boston, *Secretary*

SECTION OF OBSTETRICS AND GYNECOLOGY. Attendance, 400.

Officers for 1933:
Frank A. Pemberton, Boston, *Chairman*
Joseph W. O'Connor, Worcester, *Secretary*

SECTION OF RADIOLOGY AND PHYSIOTHERAPY. Attendance, 92.

Officers for 1933:
Edward H. Trowbridge, Worcester, *Chairman*
Charles W. Blackett, Jr., Newtonville, *Secretary*

WALTER L. BURRAGE, *Secretary.*

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### OFFICERS ELECTED BY THE COUNCIL, JUNE 8, 1932

*President:* Halbert G. Stetson, Greenfield, 39 Federal Street.

*Vice-President:* Walter A. Lane, Milton, 173 School Street.

*Secretary:* Walter L. Burrage, Brookline, 182 Walnut Street.

*Treasurer:* Charles S. Butler, Boston, 257 Newbury Street.

*Orator* for 1933: Channing Frothingham, Boston.

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### STANDING COMMITTEES FOR 1932-1933

*Committee of Arrangements*
F. H. Colby, *Chairman;* G. P. Reynolds, W. M. Shedden, W. R. Morrison, Horatio Rogers.

*Committee on Publications*
Homer Gage, *Chairman:* J. W. Bartol, R. I. Lee, R. B. Osgood, E. W. Taylor.

*Committee on Membership and Finance*
D. N. Blakely, *Chairman;* Gilman Osgood, G. C. Caner, J. E. Fish, H. F. Newton.

*Committee on Ethics and Discipline*
David Cheever, *Chairman;* W. D. Ruston, S. F. McKeen, A. C. Smith, R. L. DeNormandie.

*Committee on Medical Education and Medical Diplomas*
Reginald Fitz, *Chairman;* C. H. Lawrence, C. A. Sparrow, E. S. Calderwood, E. P. Bagg, Jr.

*Committee on State and National Legislation*
H. G. Stetson, *Chairman;* T. J. O'Brien, F. E. Jones, A. W. Marsh, Shields Warren.

*Committee on Public Health*

Dwight O'Hara, *Chairman;* E. F. Cody, F. G. Curtis, Gerald Hoeffel, G. D. Henderson.

*Committee on Malpractice Defence*

F. G. Balch, *Chairman;* E. D. Gardner, F. B. Sweet, R. P. Watkins, A. W. Allen.

*Committee on Permanent Home*

T. J. O'Brien, *Chairman;* S. B. Woodward, C. G. Mixter, J. M. Birnie, R. B. Greenough.

## SPECIAL COMMITTEES FOR 1932-1933

*New England Medical Council*

W. P. Bowers, *Chairman;* B. W. Paddock, T. H. Lanman, J. M. Birnie, H. G. Stetson.

*Committee on Cancer*

W. P. Graves, *Chairman;* G. H. Bigelow, F. G. Balch, P. E. Truesdale, G. F. Martin.

*Representatives to the Massachusetts Central Health Council*

On Administrative Board
Dwight O'Hara.

District Representatives
Eastern: E. P. Joslin, A. W. Dudley.
Northeastern: J. A. Mehan, F. W. Snow.
Southeastern: W. D. Kinney, C. P. Curley.
Central: G. D. Henderson, E. C. Miller.
Western: H. J. Downey, R. J. Carpenter.

*Committee on Public Education*

(A sub-committee of the Standing Committee on Public Health)

G. R. Minot, W. H. Robey, F. J. Cotton, F. C. Irving, R. M. Smith, E. H. Place, C. C. Simmons, J. H. Pratt, H. W. Stevens, J. B. Ayer, H. P. Mosher, R. B. Osgood, F. R. Ober, E. P. Joslin, J. D. Barney, H. L. Lombard.

## COMMITTEE ON PUBLIC RELATIONS

Members appointed yearly by the District Medical Societies.

President of the Parent Society, chairman.

Barnstable District Medical Society
John I. B. Vail, Main Street, Hyannis

Berkshire District Medical Society
P. J. Sullivan, 46 Curtis Ave., Dalton

Bristol North District Medical Society
Francis H. Dunbar, Mansfield (P. O. Address—43 Bay State Road, Boston)

Bristol South District Medical Society
William F. MacKnight, 591 Middle Street, Fall River

Essex North District Medical Society
W. Dacre Walker, 121 Main Street, Andover

Essex South District Medical Society
Harper E. Whitaker, 34 Pleasant Street, Gloucester

Franklin District Medical Society
J. A. Mather, 58 Federal Street, Greenfield

Hampden District Medical Society
S. A. Mahoney, 630 Dwight Street, Holyoke

Hampshire District Medical Society
Francis E. O'Brien, Supt., Hampshire County Sanatorium, Haydenville

Middlesex East District Medical Society
J. Harper Blaisdell, 5 Bay State Road, Boston.

Middlesex North District Medical Society
Joseph A. Mehan, 4 Park Street, Lowell

Middlesex South District Medical Society
Charles E. Mongan, 24 Central Street, Somerville

Norfolk District Medical Society
Walter A. Lane, 173 School Street, Milton

Norfolk South District Medical Society
William G. Curtis, 10 Grandview Street, Wollaston

Plymouth District Medical Society
Thomas H. McCarthy, 142 Main Street, Brockton

Suffolk District Medical Society
Harry W. Goodall, 51 Bay State Road, Boston

Worcester District Medical Society
A. W. Marsh, 690 Main St., Worcester

Worcester North District Medical Society
Fred R. Dame, 1302 Main Street, Athol

## PRESIDENTS OF DISTRICT MEDICAL SOCIETIES

VICE-PRESIDENTS (*Ex-Officiis*)

Arranged according to seniority of fellowship in the Massachusetts Medical Society

G. H. Gray, Hyannis
W. H. Robey, Boston
Pierre Brunelle, Lowell
B. M. Latham, Mansfield
F. W. Gay, Malden
R. A. Rice, Fitchburg
A. C. England, Pittsfield
W. J. McCausland, Quincy
S. F. Curran, Dorchester
E. M. Halligan, Reading
F. H. Allen, Holyoke
M. E. Cooney, Northampton
C. L. Curtis, Salem
C. G. Miles, Brockton
O. P. Mudge, Amesbury
J. M. Salles, New Bedford
A. E. Johnson, Jr., Greenfield
E. R. Leib, Worcester

## DELEGATES AND ALTERNATES TO THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION

| DELEGATES | ALTERNATES |
|---|---|
| J. M. Birnie, Springfield | W. C. Leary, Springfield |
| C. E. Mongan, Somerville | L. S. McKittrick, Boston |
| J. F. Burnham, Lawrence | E. L. Hunt, Worcester |
| W. H. Robey, Boston | Cadis Phipps, Brookline |
| E. F. Cody, New Bedford | P. E. Truesdale, Fall River |
| R. I. Lee, Boston | C. H. Lawrence, Jr., Boston. |

## ADMISSIONS RECORDED FROM JUNE 10, 1931, TO JUNE 9, 1932

| Year of Admission | Residence | Medical College |
|---|---|---|
| 1931 | Abramson, Daniel, Roxbury | 11 |
| 1931 | Ainsworth, Leonard Bennett, Lawrence | 12 |
| 1932 | Aldrich, Robert Henry, Brookline | 18 |
| 1931 | Alexandrov, Vitally John, Rutland | 12 |
| 1932 | Allman, Sydney Joseph, Dorchester | 12 |
| 1931 | Angelo, Gaspar, Cambridge | 12 |
| 1932 | Arent, John George, South Boston | 12 |
| 1931 | Ash, Abraham, Lawrence | 12 |
| 1931 | Bailey, Daniel Joseph, Weymouth | 12 |
| 1931 | Bailey, Karl Roland, Jamaica Plain | 12 |
| 1932 | *Basch, William Eustis Russell, Brookline | 6 |

| | | |
|---|---|---|
| 1931 | Bateman, William Augustine, Lawrence | 12 |
| 1931 | Beaulieu, Florence Antoinette, Worcester | 12 |
| 1931 | Belin, Jacob Frank, Quincy | 12 |
| 1931 | Bell, Robert Malseed, Taunton | 5 |
| 1932 | Benjamin, Henry, Chelsea | 12 |
| 1932 | Blain, Daniel, Stockbridge | 36 |
| 1931 | Bloom, Henry Rostler, Boston | 10 |
| 1931 | Boyd, Phillips Leland, Jamaica Plain | 11 |
| 1932 | Brennan, Charles Leo, Lowell | 10 |
| 1932 | Brigham, Robert Bennett, Northampton | 11 |
| 1931 | Broderick, Edward O'Connell, Quincy | 12 |
| 1931 | Brown, Madelaine Ray, Cambridge | 18 |
| 1931 | Buckley, Francis Crowell, Oak Bluffs | 10 |
| 1931 | Burgin, Leo Benjamin, Roxbury | 11 |
| 1931 | Burke, Lawrence Francis, Clinton | 12 |
| 1931 | Butts, John Berchmans, Worcester | 19 |
| 1932 | Cabeceiras, Henry Joseph, Belmont | 12 |
| 1932 | Capece, Nicholas Joseph, Milford | 10 |
| 1932 | *Carogana, Anthony Peter, Chelsea | 20 |
| 1932 | Carroll, Walter James Edward, Arlington | 16 |
| 1932 | Cass, John William, Jr., Brookline | 1 |
| 1932 | Chapman, Lillian Dobson, Mattapan | 12 |
| 1932 | Clarke, Elmer Willis, Norton | 12 |
| 1932 | Clow, Henry Leon, East Gardner | 12 |
| 1931 | Cohen, Benjamin, Salem | 12 |
| 1932 | Cohn, Samuel Arthur, Waltham | 12 |
| 1932 | Columbo, Nunzio John, Maynard | 12 |
| 1932 | Conway, James Francis, West Roxbury | 12 |
| 1932 | Cottrell, Martha Louise Pomeroy Sanderson, Amherst | 28 |
| 1932 | *Crowell, Archie Durkee, Framingham | 6 |
| 1931 | Daffinee, Ralph Weir, Boston | 11 |
| 1932 | Darrah, Lee Wallingford, East Gardner | 26 |
| 1931 | Dauphin, Henry Francis, Taunton | 10 |
| 1932 | Davenport, Benita Coolidge, Cambridge | 10 |
| 1932 | DeBlois, Elizabeth, Boston | 12 |
| 1931 | Desrochers, Bernard Charles, Adams | 12 |
| 1931 | DeWolfe, Henry Charles Mitchell, Malden | 14 |
| 1932 | Djerf, Frederick Joseph, Fitchburg | 12 |
| 1931 | Donovan, Richard Joseph, Lawrence | 11 |
| 1932 | Drapeau, Raoul Laurent, Lowell | 10 |
| 1932 | Eccleston, Adah Louise Brown, Southbridge | 10 |
| 1932 | Edwards, Edward Allen, Brookline | 12 |
| 1931 | Egan, John Joseph, Jr., Gloucester | 19 |
| 1932 | Eley, Richard Cannon, Brookline | 23 |
| 1932 | Fasce, Charles Francis, Pittsfield | 27 |
| 1932 | Feldman, Samuel Robert, Boston | 10 |
| 1931 | Fernald, Marion Elizabeth Spaulding, Cohasset | 10 |
| 1932 | Fisher, William Howard, Malden | 12 |
| 1932 | Fleming, Francis James, Belmont | 35 |
| 1932 | Frank, Israel Robert, Dorchester | 12 |
| 1932 | *Gaber, Nathan, Boston | 6 |
| 1931 | Gahan, John Winthrop, Medford | 16 |
| 1932 | Garnon, Salomon, Danvers | 13 |
| 1932 | *Gerry, Frank Henry, Arlington | 6 |
| 1931 | Gettes, Charles Nathaniel, Watertown | 30 |
| 1932 | Gibson, Hildur Ingeborg, Belmont | 12 |
| 1932 | Gilbert, Alfred Edmund, Hudson | 28 |
| 1932 | Giobbe, Ciro, Somerville | 12 |
| 1931 | Goldshine, Archie David, Brookline | 12 |
| 1931 | Goodspeed, Harry Bancroft, Worcester | 4 |
| 1931 | Grant, George Joshua Maria Moody, Lowell | 19 |
| 1932 | *Greene, Charles Edward, Chelsea | 31 |
| 1931 | Guardo, James Leslie, Roslindale | 10 |
| 1931 | Gundersen, Trygve, Brookline | 11 |
| 1932 | Hamm, Leslie, Brookline | 12 |
| 1932 | Hanflig, Samuel Sunny, Chelsea | 11 |
| 1932 | Hemond, Fernand Joseph, Pittsfield | 32 |
| 1932 | Hendry, John Joseph, Chelsea | 12 |
| 1932 | Hermanson, Abrum Louis, Roxbury | 12 |
| 1931 | *Hewett, Arthur James, Newburyport | 37 |
| 1932 | Holt, Edward Wells Atwood, North Andover | 11 |
| 1932 | Howard, Allen Richmond, Westwood | 22 |
| 1931 | Hulse, Herbert James, Rockland | 12 |
| 1931 | Hurlburt, Alton Lyman, Brockton | 12 |
| 1931 | Jacobs, Maurice, Dorchester | 12 |
| 1932 | Johnson, Mary, North Grafton | 10 |
| 1931 | Jolma, Keojo Kullervo, Quincy | 12 |
| 1932 | Karlsberg, Isador Joseph, Palmer | 10 |
| 1931 | *Kassels, Maurice Emanuel, Everett | 6 |
| 1931 | Kattwinkel, Egon Emil, Auburndale | 11 |
| 1931 | Keaveney, George Peter, Fitchburg | 21 |
| 1932 | Keefe, Clarence Joseph, North Wilbraham | 12 |
| 1931 | Kirkendall, Henry Laing, Worcester | 34 |
| 1931 | Kleiman, Charles, Roxbury | 12 |
| 1931 | Kopp, Israel, Dorchester | 12 |
| 1931 | Lacey, James Theophilus, Southbridge | 4 |
| 1931 | Lagerstedt, Edward William Howard, Brockton | 10 |
| 1931 | Lalime, George Louis, Worcester | 12 |
| 1932 | Lang, Walter Emery, Westborough | 8 |
| 1931 | Lanson, Freeman Arthur, Pittsfield | 11 |
| 1932 | Lee, Walter Wilfrid, North Adams | 24 |
| 1931 | Linton, Robert Ritchie, Cambridge | 11 |
| 1932 | Littman, David, Chelsea | 12 |
| 1931 | *Logue, Francis John, Woburn | 6 |
| 1932 | Long, Norman Gillmor, Lowell | 10 |
| 1932 | MacDonald, Joseph James, Brighton | 29 |
| 1932 | Mahoney, Charles Frederick, Winthrop | 12 |
| 1932 | Manley, Frederick Neil, Quincy | 12 |
| 1932 | Mastroianni, Nicholas Anthony, Milford | 12 |
| 1931 | McCarthy, Horace Frank, Lawrence | 12 |
| 1932 | McCarthy, John Anthony, South Hanson | 12 |
| 1931 | McCarthy, Lawrence Joseph, Chelsea | 12 |
| 1931 | McClusky, Donald Knight, Worcester | 10 |
| 1932 | McManamy, Margaret Cecilia, Dorchester | 12 |
| 1932 | McPeak, Clarence Nuckolls, Cambridge | 23 |
| 1931 | Menges, Ernest Hutchinson, Nantucket | 10 |
| 1931 | Miller, Ralph Thompson, Ware | 14 |
| 1931 | Morrison, Norman Brooks, Brookline | 10 |
| 1932 | Mulholland, Bernard Joseph, Lawrence | 3 |
| 1931 | Murphy, Helena Mary, Worcester | 12 |
| 1932 | Musso, George Henry, Lynn | 39 |
| 1932 | *Newman, Earl Lynwood, Lynn | 6 |
| 1931 | Nigro, Henry, Medford | 10 |
| 1932 | Noble, Robert Cronley, Northampton | 7 |
| 1932 | *Norton, Alphonsus David, Hyde Park | 20 |
| 1932 | Nowak, Stanley John Gregory, Belmont | 11 |
| 1932 | O'Neill, Elizabeth Veronica, Mattapan | 12 |
| 1932 | Osborne, Carver Haines, Brookline | 10 |
| 1932 | Osterheld, Roger Golden, Taunton | 10 |
| 1931 | Overholt, Richard Hollis, Boston | 2 |
| 1932 | Pearlstein, Max, North Grafton | 12 |
| 1932 | Pelkus, Henry Leo, Jamaica Plain | 12 |
| 1931 | *Pentz, Herbert Hammersia, Winchester | 20 |
| 1931 | Perry, Chauncy Valentine, Greenfield | 11 |
| 1931 | Pittman, Helen Sinclair, Cambridge | 18 |
| 1932 | Polcari, Ead Anne, Arlington | 12 |
| 1931 | Powell, James Patrick, Arlington | 11 |
| 1932 | *Praglin, Addy, Boston | 31 |
| 1932 | Radcliffe, Ernest James, Amherst | 35 |
| 1931 | Radcliffe, Frederick Roberts, Middleton | 12 |
| 1932 | Radin, Aaron Harold, Roxbury | 12 |
| 1931 | Reid, Howard Stanton, Cohasset | 10 |
| 1932 | Remy, Lorenzo Albert, Chicopee Falls | 10 |
| 1932 | Robey, Nathaniel Charles, East Gardner | 1 |
| 1932 | Rogers, Augustine Thomas, Hyde Park | 12 |
| 1931 | Rose, Wilfred Anthony, Lawrence | 12 |
| 1932 | Rosenberg, Henry Norman, Boston | 10 |
| 1932 | Rosston, Cyril Parks, North Adams | 12 |
| 1932 | Rowley, Harold Frederick, Boston | 10 |
| 1931 | Rudd, Jacob Louis, Cambridge | 11 |
| 1932 | Rutherford, Rondall Walker, Boston | 10 |
| 1931 | Sanderson, Paul Graves, Springfield | 11 |
| 1931 | Scarcello, Nicholas Salvatore, Cambridge | 12 |
| 1932 | Schlesinger, Monroe Jacob, Brighton | 11 |
| 1931 | Schroeder-Sloman, Sophie Willene, Boston | 17 |
| 1932 | Schultz, Robert Valentine, Belmont | 1 |
| 1931 | Sears, John Berell, Roxbury | 11 |
| 1932 | Segal, Jacob, Framingham | 12 |
| 1931 | Segal, Samuel, Roxbury | 10 |
| 1931 | *Shattuck, Ray Hammond, Dorchester | 6 |

| | | |
|---|---|---|
| 1932 | Shelby, Isaac Gerald, Worcester | 25 |
| 1931 | *Sherman, Ruth Esther Greenbaum, Brighton | 20 |
| 1931 | Sherwood, David Winne, Newtonville | 11 |
| 1932 | Sidwell, Doris May, Danvers | 7 |
| 1931 | Simone, Donald Johnson, Springfield | 11 |
| 1932 | Skeirik, Jibran Yusuf, Lawrence | 11 |
| 1931 | Skelton, Alton Beecher, Winchendon | 7 |
| 1931 | Smillie, Wilson George, Waban | 11 |
| 1931 | Smith, Edward Mack, Methuen | 12 |
| 1932 | Stein, Calvert, Palmer | 12 |
| 1932 | Stern, Morton Samuel, Brookline | 33 |
| 1932 | Sternstein, Herman, Brookline | 12 |
| 1932 | Stevenson, William Robb, Boston | 10 |
| 1931 | Stiffle, Abraham Maurice, Taunton | 12 |
| 1931 | *Stochaj, John William, Webster | 31 |
| 1932 | Stockwell, Frank Whitten, Newburyport | 10 |
| 1932 | Stowell, Fred Austin, Newburyport | 38 |
| 1932 | Sutliff, Wheelan Dwight, Newton Highlands | 33 |
| 1932 | Swope, Oscar Clinton, Kingston | 10 |
| 1931 | Tegelberg, Julius John, Worcester | 10 |
| 1931 | Thompson, James Braden, Needham | 8 |
| 1932 | Thompson, Leonard Bicknell, Boston | 10 |
| 1932 | Todd, John Joseph, South Boston | 12 |
| 1931 | Tosney, Harold John, Taunton | 15 |
| 1932 | Underwood, David Gleason, Hingham | 3 |
| 1932 | Vuornos, Sirkka Elisabeth, Mattapan | 12 |
| 1932 | *Waldman, Daniel, Jamaica Plain | 31 |
| 1931 | Weisman, Hyman Jacob, Cambridge | 12 |
| 1932 | Wellington, Anna Colburn, Weymouth | 12 |
| 1931 | White, Charles Edwin, Taunton | 10 |
| 1931 | White, Hilary Francis, Fall River | 16 |
| 1931 | Whitehorn, John Clare, Belmont | 11 |
| 1931 | Wilder, Grace Evelyn, Middleton | 18 |
| 1931 | Wilkinson, Samuel Allen, Jr., Auburndale | 4 |
| 1932 | *Wiswall, Thomas Augustus, Falmouth | 6 |
| 1932 | Woodall, Charles Simpson, Waltham | 11 |
| 1932 | Wozmack, Casimir Francis, Haverhill | 12 |
| 1932 | Wroblewski, Walter George, Lowell | 12 |
| 1931 | Yood, Bernard, Taunton | 12 |
| 1932 | Ziter, Fred Michael Herbert, Springfield | 19 |
| 1932 | Zoll, Samuel Howard, Everett | 9 |
| 1931 | *Zuckermann, Bernard, Dorchester | 6 |

*Indicates that the candidate's diploma was approved by the Committee on Medical Education and Medical Diplomas.

Total 203

KEY TO MEDICAL COLLEGES

1. Yale University School of Medicine
2. University of Nebraska College of Medicine
3. University of Maryland School of Medicine and College of Physicians and Surgeons
4. University of Pennsylvania School of Medicine
5. St. Louis University School of Medicine
6. Middlesex College of Medicine and Surgery
7. University of Vermont College of Medicine
8. Hahnemann Medical College and Hospital of Philadelphia
9. McGill University Faculty of Medicine
10. Boston University School of Medicine
11. Harvard University Medical School
12. Tufts College Medical School
13. University of Montreal Faculty of Medicine
14. Dalhousie University Faculty of Medicine
15. Rush Medical College of the University of Chicago
16. Jefferson Medical College of Philadelphia
17. University of Illinois College of Medicine
18. Johns Hopkins University School of Medicine
19. Georgetown University School of Medicine
20. College of Physicians and Surgeons, Boston
21. University of Rochester School of Medicine
22. Cooper Medical College
23. University of Virginia Department of Medicine
24. University of Georgia Medical Department
25. University of Tennessee College of Medicine
26. University of Pittsburgh School of Medicine
27. Albany Medical College
28. College of Medical Evangelists
29. University of Buffalo School of Medicine
30. Temple University School of Medicine
31. St. Louis College of Physicians and Surgeons
32. Laval University Faculty of Medicine
33. Cornell University Medical College
34. Long Island College Hospital
35. University of Toronto Faculty of Medicine
36. Vanderbilt University School of Medicine
37. Chicago College of Medicine and Surgery
38. Cleveland-Pulte Medical College
39. New York University Medical College

## DEATHS REPORTED FROM JUNE 10, 1931 TO JUNE 9, 1932

| Admitted | Name | Place of Death | Date of Death | Age |
|---|---|---|---|---|
| 1874 | Appleton, William | Boston | Mar. 21, 1932 | 84 |
| 1890 | Bedard, Joseph Armand | Lynn | Jan. 26, 1932 | 65 |
| 1906 | Beede, M. Josephine | Pasadena, Cal. | June 16, 1931 | 65 |
| 1930 | Blumenfield, Abraham | Boston | Jan. 27, 1932 | 26 |
| 1878 | †Boland, Elisha Shepard | Dorchester | Apr. 7, 1932 | 79 |
| 1888 | Brown, Wilfred Gardner | Plymouth | Dec. 12, 1931 | 74 |
| 1900 | Cahill, John Thomas | Methuen | June 26, 1931 | 63 |
| 1915 | Callahan, John Francis | Brockton | July 12, 1931 | 58 |
| 1906 | Carley, Frederic James | North Attleboro | Nov. 10, 1931 | 53 |
| 1898 | Chapin, Clifford Samuel | Great Barrington | Jan. 26, 1932 | 59 |
| 1923 | Cohoon, Elisha Henry | Roxbury | July 21, 1931 | 56 |
| 1881 | Colt, Henry | Pittsfield | Dec. 8, 1931 | 75 |
| 1882 | Crawford, Charles Henry | Lawrence | Jan. 13, 1932 | 76 |
| 1898 | Curry, Edmund Farnham | Fall River | Oct. 29, 1931 | 59 |
| 1923 | Davidson, Percy Bernard | Boston | Apr. 29, 1932 | 36 |
| 1903 | Derby, George Strong | Boston | Dec. 12, 1931 | 56 |
| 1923 | Dunphy, John Joseph | Brighton | Oct. 12, 1931 | 37 |
| 1879 | †Durell, Thomas Moulton | Somerville | Mar. 4, 1932 | 73 |
| 1888 | Fay, William Eastman | Santa Monica, Cal. | Jan. 15, 1932 | 72 |
| 1884 | Finnigan, Patrick Joseph | Cambridge | Oct. 7, 1931 | 73 |
| 1914 | Fleet, William Ernest | Cambridge | May 25, 1932 | 59 |
| 1913 | Foley, Thomas Brinsley | Boston | Nov. 12, 1931 | 52 |
| 1917 | Frankel, David Israel | Boston | Jan. 23, 1932 | 47 |
| 1892 | †Fuller, James Robert | Andover | Dec. 11, 1931 | 83 |
| 1906 | Gilman, Charles Sleeper | Laconia, N. H. | Jan. 20, 1932 | 58 |
| 1887 | Greene, Ray Woodville | Worcester | July 6, 1931 | 73 |
| 1911 | Handy, Harrie Delmar | Boston | May 16, 1932 | 63 |
| 1910 | Hennelly, Thomas Patrick | Pittsfield | May 19, 1932 | 50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1890 | Hobbie, John Remington | North Adams | Oct. | 3, | 1931 | 79 |
| 1876 | Howe, Octavius Thorndike | Boston | Dec. | 27, | 1931 | 80 |
| 1898 | Howe, Walter Clarke | Boston | Aug. | 21, | 1931 | 59 |
| 1904 | Hunt, Wilson Eugene | Malden | Mar. | 30, | 1932 | 56 |
| 1913 | Johnson, Harold Abbott | Lynn | Dec. | 11, | 1931 | 58 |
| 1878 | Johnson, William Louis | Worcester | July | 3, | 1931 | 74 |
| 1909 | Kearney, Joseph Patrick | Lowell | Sept. | 25, | 1931 | 52 |
| 1913 | Kenney, Clarence Bronson | Winchendon | July | 1, | 1931 | 45 |
| 1890 | Kilroy, Philip | Springfield | May | 25, | 1932 | 66 |
| 1892 | Lancaster, Sherman Russell | Westboro | Jan. | 26, | 1932 | 70 |
| 1898 | Lavalee, George Omer | Lowell | Jan. | 13, | 1932 | 58 |
| 1872 | Lovejoy, Charles Averill | Lynn | Feb. | 17, | 1932 | 85 |
| 1899 | Mackie, William Charles | Brookline | Aug. | 1, | 1931 | 69 |
| 1905 | McCaffrey, Charles Francis | Somerville | May | 20, | 1932 | 55 |
| 1897 | McCarthy, Thomas Francis | Marlborough | Aug. | 9, | 1931 | 67 |
| 1900 | †Merritt, Victor Sulviro | Springfield | May | 2, | 1932 | 69 |
| 1928 | Morais, Wilfrid Aurelien | Fall River | May | 16, | 1932 | 31 |
| 1886 | †Newhall, Lawrence Thompson | Brookfield | July | 9, | 1931 | 74 |
| 1874 | †Nims, Edward Beecher | Springfield | May | 24, | 1932 | 94 |
| 1870 | †Page, Charles Whitney | Hartford, Ct. | Feb. | 16, | 1932 | 86 |
| 1880 | †Parsons, Azariah Worthington | Oakwood, Texas | Sept. | 4, | 1931 | 74 |
| 1887 | Paul, Walter Everard | Roxbury | July | 24, | 1931 | 69 |
| 1903 | †Penny, Herbert Thomas | Cliftondale | Nov. | 20, | 1931 | 68 |
| 1892 | Porter, Charles Allen | Boston | July | 3, | 1931 | 64 |
| 1930 | Prouty, Albert Henry | Brookfield | Aug. | 3, | 1931 | 64 |
| 1883 | †Reed, William Gilman | Southbridge | June | 25, | 1931 | 83 |
| 1926 | Richmond, Ivus Irvin | Brockton | Apr. | 8, | 1932 | 62 |
| 1885 | †Round, Arthur Morey | Boston | Feb. | 24, | 1932 | 79 |
| 1909 | Shaw, John William | Brighton | Dec. | 5, | 1931 | 56 |
| 1904 | Slack, Francis Hervey | Allston | May | 5, | 1932 | 57 |
| 1922 | Stanhope, Alvin Hatch | Middleton | Sept. | 17, | 1931 | 74 |
| 1911 | Sweeney, Michael Thomas | Quincy | July | 5, | 1931 | 50 |
| 1926 | Sylvia, Manuel Victorino | New Bedford | Mar. | 22, | 1932 | 63 |
| 1915 | Tiani, Bernardo | Lawrence | Feb. | 14, | 1931 | 47 |
| 1920 | Tompkins, Byron Vincent | Sheffield | May | 13, | 1926 | 71 |
| 1908 | Towle, Edwin Dudley | Salem | Dec. | 22, | 1931 | 68 |
| 1894 | †Walker, William | Revere | Jan. | 29, | 1932 | 69 |
| 1929 | Wells, Clinton Cyrus | Roxbury | May | 30, | 1931 | 24 |
| 1894 | †Weston, George Dake | Springfield | Oct. | 25, | 1931 | 71 |
| 1882 | Woodward, Lemuel Fox | Worcester | Nov. | 12, | 1931 | 74 |
| 1879 | Woodworth, Dwight Sidney | Fitchburg | Aug. | 31, | 1931 | 79 |
| 1924 | Yaffe, Joseph Philip | Brighton | Sept. | 24, | 1931 | 35 |

†Retired Fellow.

Total number of deaths, 70.

## COUNCILORS—1932-1933

### Elected by the District Medical Societies at Their Annual Meetings, April 15 to May 15, 1932

Note:—The initials M. N. C. following the name of a Councilor indicate that he is a member of the Nominating Committee. V. P. indicates that a member is a Councilor by virtue of his office as President of a district society and so Vice-President of the general society. C. indicates that he is chairman of a standing committee, Sec. that he is secretary of his District Society.

#### Barnstable

G. H. Gray, V. P., Hyannis.
W. D. Kinney, M. N. C., Osterville.
E. S. Osborne, West Dennis.
J. I. B. Vail, Sec., Hyannis.

#### Berkshire

A. C. England, V. P., Pittsfield, 7 North St.
Modestino Criscitiello, Jr., Pittsfield, 8 Bank Row.
I. S. F. Dodd, Pittsfield, 34 Fenn St.
H. J. Downey, Sec., M. N. C., Pittsfield, 184 North St.
W. P. Kelly, Pittsfield, 61 Union St.
H. G. Mellen, Pittsfield, 50 North St.
P. J. Sullivan, Dalton, 46 Curtis Ave.

#### Bristol North

B. M. Latham, V. P., Mansfield, 26 North Main St.
W. H. Allen, Mansfield, 70 North Main St.
A. R. Crandell, Taunton, 48 Church Green.
F. A. Hubbard, M. N. C., Taunton, 57 High St.
C. B. Kingsbury, Sec., Taunton, 63 Prospect St.

#### Bristol South

J. M. Salles, V. P., New Bedford, 113 Grinnell St.
J. A. Barre, Fall River, 1555 Pleasant St.
R. H. Baxter, Marion, 6 South St.
G. W. Blood, Fall River, 82 New Boston Road.
R. B. Butler, Fall River, 278 North Main St.
E. F. Cody, M. N. C., New Bedford, 105 South Sixth St.
D. J. Fennelly, Fall River, 276 Winter St.
E. D. Gardner, New Bedford, 150 Cottage St.
S. V. Merritt, Fall River, 297 Osborn St.
W. A. Nield, New Bedford, 286 Pleasant St.
Charles Shanks, Sec., New Bedford, 645 Kempton St.
I. N. Tilden, Mattapoisett, Barstow St.
P. E. Truesdale, Fall River, 151 Rock St.
Russell Wood, New Bedford, 331 Union St.

#### Essex North

O. P. Mudge, V. P., Amesbury, 152 Main St.
H. G. Armitage, Haverhill, 119 Emerson St.
E. S. Bagnall, Sec., Groveland, 281 Main St.
J. F. Burnham, M. N. C., Lawrence, 567 Haverhill St.
H. F. Dearborn, Lawrence, 193 Garden St.
A. P. George, Haverhill, 397 Main St.
T. R. Healy, Newburyport, Off. Boston, 370 Marlborough St.
J. J. McArdle, Lawrence, 477 Essex St.
F. S. Smith, North Andover, 5 Third St.
F. W. Snow, Newburyport, 24 Essex St.
L. T. Stokes, Haverhill, 190 Main St.
W. D. Walker, Andover, 121 Main St.

ESSEX SOUTH

C. L. Curtis, V. P., Salem, 101 Federal St.
F. W. Baldwin, Danvers, 25 Conant St.
N. P. Breed, Lynn, 9 Washington Sq.
J. F. Donaldson, Salem, 32 Lynde St.
R. E. Foss, Peabody, 125 Main St.
E. B. Hallett, Gloucester, 63 Middle St.
W. T. Hopkins, Lynn, 7 Atlantic St.
J. F. Jordan, Peabody, 76 Lynn St.
G. H. Kirkpatrick, Lynn, 64 Broad St.
A. E. Parkhurst, M. N. C., Beverly, 163 Cabot St.
O. S. Pettingill, Middleton, Essex County Sanatorium.
C. H. Phillips, Beverly, 221 Cabot St.
W. G. Phippen, Salem, 31 Chestnut St.
R. E. Stone, Sec., Beverly, 88 Lothrop St.
J. W. Trask, Lynn, 90 Ocean St.

FRANKLIN

A. E. Johnson, Jr., V. P., Greenfield, 58 Federal St.
R. A. McGillicuddy, Turners Falls, 113 Avenue A.
Charles Moline, Sec., Sunderland, Off. South Deerfield, 120 Main St.
H. G. Stetson, President, M. N. C., Greenfield, 39 Federal St.

HAMPDEN

F. H. Allen, V. P., Holyoke, 16 Fairfield Ave.
J. M. Birnie, Ex-Pres., Springfield, 14 Chestnut St.
J. J. Carroll, Holyoke, 172 Chestnut St.
L. D. Chapin, Springfield, 20 Maple St.
M. W. Harrington, Indian Orchard, 70 Oak St.
G. D. Henderson, Holyoke, 312 Maple St.
M. B. Hodskins, Palmer, Monson State Hospital.
E. A. Knowlton, Holyoke, 207 Elm St.
S. A. Mahoney, Holyoke, 630 Dwight St.
M. W. Pearson, Ware, 19 Pleasant St.
A. G. Rice, Springfield, 33 School St.
R. A. Rochford, Springfield, 20 Maple St.
G. L. Schadt, M. N. C., Springfield, 44 Chestnut St.
E. S. Smith, Westfield, 93 Elm St.
H. L. Smith, Sec., Springfield, 249 Union St.
G. L. Steele, Springfield, 20 Maple St.
H. W. Van Allen, Springfield, 19 Maple St.

HAMPSHIRE

M. E. Cooney, V. P., Northampton, 16 Center St.
A. J. Bonneville, Hatfield, 43 Main St.
T. F. Corriden, Northampton, 16 Center St.
J. G. Hanson, M. N. C., Northampton, 219 Elm St.
F. E. O'Brien, Sec., Haydenville, Hampshire County Sanatorium.

MIDDLESEX EAST

E. M. Halligan, V. P., Reading, 3 Salem St.
J. H. Blaisdell, M. N. C., Winchester, Off. Boston, 5 Bay State Rd.
A. R. Cunningham, Sec., Winchester, 76 Church St.
Richard Dutton, Wakefield, 33 Avon St.
C. E. Montague, Wakefield, 15 Richardson Ave.
C. E. Ordway, Winchester, 371 Main St.
R. R. Stratton, Melrose, 538 Lynn Fells Parkway.

MIDDLESEX NORTH

Pierre Brunelle, V. P., Lowell, 30 Standish St.
M. L. Alling, Lowell, 9 Central St.
A. R. Gardner, Lowell, 18 Shattuck St.
J. E. Lamoureux, Lowell, 763 Merrimack St.
G. A. Leahy, Lowell, 128 Merrimack St.
J. A. Mehan, Lowell, 4 Park St.
T. A. Stamas, Sec., Lowell, 226 Central St.
F. E. Varney, M. N. C., North Chelmsford.

MIDDLESEX SOUTH

F. W. Gay, V. P., Malden, 105 Salem St.
C. F. Atwood, Arlington, 821 Massachusetts Ave.
H. T. Baldwin, Chestnut Hill, 96 Middlesex Rd.
E. W. Barron, Malden, Off. Boston, 520 Commonwealth Ave.
C. F. K. Bean, West Medford, 51 Harvard Ave.
Conrad Bell, Waltham, 820 Main St.
E. H. Bigelow, Ex-Pres., Framingham Center, 31 Pleasant St.
A. H. Blake, West Somerville, 81 College Ave.
W. T. Burke, Medford, 112 Salem St.
Herbert Cholerton, West Somerville, 94 College Ave.
F. H. Colby, C., Charlestown, Off. Boston, 6 Commonwealth Ave.
W. H. Crosby, Brighton, 304 Faneuil St.
D. F. Cummings, Natick, 12 East Central St.
D. C. Dow, Cambridge, 1587 Massachusetts Ave.
A. W. Dudley, M. N. C., Cambridge, 1740 Massachusetts Ave.
I. J. Fisher, West Newton, 79 Chestnut St.
H. H. Flagg, Charlestown, Off. Revere, 270 Broadway.
H. Q. Gallupe, Waltham, 751 Main St.
F. A. Higginbotham, Watertown, 112 Mt. Auburn St.
N. M. Hunter, Hudson, 20 Lincoln St.
C. M. Hutchinson, Cambridge, 47 Garden St.
L. H. Jack, West Newton, 379 Austin St.
F. R. Jouett, Cambridge, 1 Craigie St.
Josephine D. Kable, Marlborough, 42 West Main St.
H. J. Kearney, Everett, 385 Broadway.
E. D. Leonard, Chestnut Hill, 129 Monadnock Rd.
A. A. Levi, Sec., Cambridge, Off. Boston, 485 Commonwealth Ave.
Edward Mellus, Newton, 419 Waverley Ave.
C. E. Mongan, Somerville, 24 Central St.
F. L. Morse, Somerville, 78 Highland Ave.
J. P. Nelligan, Cambridge, 2336 Massachusetts Ave.
W. A. Noonan, Cambridge, Off. Boston, 270 Commonwealth Ave.
Dwight O'Hara, C., Waltham, Off. Boston, 520 Commonwealth Ave.
Ezekiel Pratt, Arlington, 385 Massachusetts Ave.
W. D. Reid, Newton, Off. Boston, 510 Commonwealth Ave.
L. A. Schall, Newton Center, Off. Boston, 270 Commonwealth Ave.
H. L. Seavey, Cambridge, 1879 Massachusetts Ave.
J. W. Sever, Cambridge, Off. Boston, 321 Dartmouth St.
M. J. Shaughnessey, Framingham, 188 Concord St.
F. G. Smith, Somerville, 145 Highland Ave.
C. H. Staples, Malden, 180 Summer St.
H. W. Thayer, Newtonville, 355 Walnut St.
H. J. Walcott, Concord, 92 Main St.
H. P. Walcott, Ex-Pres., Cambridge, 11 Waterhouse St.
W. S. Whittemore, Cambridge, 3 Concord Ave.
Alfred Worcester, Ex-Pres., Waltham, 314 Bacon St.

NORFOLK

S. F. Curran, V. P., Dorchester, 104 Norfolk St.
H. L. Babcock, Dedham, Off. Boston, 416 Marlborough St.
J. W. Bail, Brookline, 1677 Beacon St.
F. J. Bailey, Dorchester, 40 Hancock St.
Henry Baker, Dorchester, Off. Boston, 483 Beacon St.
F. G. Balch, C., Jamaica Plain, Off. Boston, 279 Clarendon St.
W. W. Barker, Dorchester, 25 Lyndhurst St.
A. S. Begg, West Roxbury, Off. Boston, 80 East Concord St.

D. N. Blakely, C., Brookline, Off. Boston, 87 Milk St.
W. L. Burrage, Secretary, Brookline, 182 Walnut St.
W. S. Burrage, Brookline, Off. Boston, 261 Beacon St.
F. S. Cruickshank, Sec., Roslindale, 31 Robert St.
A. H. Davison, Milton, 76 Blue Hills Parkway.
D. G. Eldridge, M. N. C., Dorchester, 15 Monadnock St.
C. B. Faunce, Jr., Jamaica Plain, Off. Boston, 412 Beacon St.
J. E. Fish, Canton, Massachusetts Hospital School.
C. S. Francis, Brookline, 76 High St.
N. W. Gillespie, Dorchester, 632 Columbia Rd.
J. I. Grover, Dorchester, 281 Ashmont St.
J. B. Hall, Roxbury, 60 Windsor St.
H. B. Jackson, Jamaica Plain, 9 Harris Ave.
G. W. Kaan, Sharon, 15 Edgewood Rd.
W. B. Keeler, Roxbury, 136 Warren St.
W. C. Kite, Milton, 17 Russell St.
W. A. Lane, V. P., Milton, 173 School St.
J. S. H. Leard, West Roxbury, 1895 Center St.
C. L. MacGray, Needham, 1088 Great Plain Ave.
Charles Malone, Jamaica Plain, 46 St. John St.
F. P. McCarthy, Milton, Off. Boston, 371 Commonwealth Ave.
S. F. McKeen, Brookline, 96 Dean Rd.
J. R. McPeake, Milton, 16 Blue Hills Parkway.
T. J. Murphy, Roxbury, Off. Boston, 520 Beacon St.
W. R. Ohler, Jamaica Plain, Off. Boston, 319 Longwood Ave.
T. H. O'Toole, Sr., Norwood, 264 Railroad Ave.
Frederick Reis, Dorchester, 464 Washington St.
S. A. Robins, Roxbury, Off. Boston, 636 Beacon St.
C. A. Rowe, Milton, 454 Adams St.
A. A. Shapira, Jamaica Plain, Off. Boston, 587 Beacon St.
J. L. Sullivan, Roxbury, 89 Waverly St.
H. F. R. Watts, Dorchester, 6 Monadnock St.
W. A. White, Roxbury, Off. Boston, 57 Canal St.
W. H. Young, Dedham, Off. Boston, 270 Commonwealth Ave.

NORFOLK SOUTH

W. J. McCausland, V. P., Quincy, 123 Franklin St.
C. S. Adams, Wollaston, 62 Brook St.
T. B. Alexander, Scituate, First Parish Rd.
W. G. Curtis, Wollaston, 10 Grand View Ave.
G. V. Higgins, Randolph, Warren St.
F. E. Jones, Quincy, 1150 Hancock St.
N. R. Pillsbury, Sec., South Braintree, Norfolk County Hospital.
C. A. Sullivan, M. N. C., South Braintree, 20 Pond St.

PLYMOUTH

C. G. Miles, V. P., Brockton, 23 Main St.
E. D. Hill, M. N. C., Plymouth, 27 Court St.
P. H. Leavitt, Brockton, 129 West Elm St.
T. H. McCarthy, Brockton, 142 Main St.
J. J. McNamara, Brockton, 221 Main St.
G. A. Moore, Sec., Brockton, 167 Newbury St.
F. W. Murdock, Brockton, 56 West Elm St.
J. P. Shaw, Brockton, 6 Main St.
A. C. Smith, Brockton, 142 Main St.

SUFFOLK

W. H. Robey, V. P., Boston, 202 Commonwealth Ave.
A. W. Allen, Boston, 264 Beacon St.
A. E. Austin, Boston, 270 Commonwealth Ave.
J. W. Bartol, Ex-Pres., M. N. C., Boston, 1 Chestnut St.
G. H. Bigelow, Boston, State House, Room 546.
Horace Binney, Boston, 403 Beacon St.
Gerald Blake, Boston, 311 Beacon St.
W. B. Breed, Boston, 264 Beacon St.
W. J. Brickley, Boston, 524 Commonwealth Ave.
J. E. Briggs, Boston, 477 Beacon St.
C. S. Butler, Treasurer, Boston, 257 Newbury St.
David Cheever, C., Boston, Peter Bent Brigham Hospital.
R. C. Cochrane, Boston, 319 Longwood Ave.
F. J. Cotton, Boston, 520 Commonwealth Ave.
A. H. Crosbie, Boston, 520 Commonwealth Ave.
W. P. Cross, South Boston, 491 Broadway.
Lincoln Davis, Boston, 205 Beacon St.
G. P. Denny, Boston, 66 Commonwealth Ave.
R. L. DeNormandie, Boston, 355 Marlborough St.
W. H. Ensworth, East Boston, 40 Princeton St.
Reginald Fitz, C., Boston, Peter Bent Brigham Hospital.
G. L. Gately, East Boston, 624 Bennington St.
H. W. Goodall, Boston, 51 Bay State Rd.
R. B. Greenough, Ex-Pres., Boston, 8 Marlborough St.
John Homans, Boston, Peter Bent Brigham Hospital.
H. T. Hutchins, Boston, 520 Commonwealth Ave.
E. P. Joslin, Boston, 81 Bay State Rd.
F. S. Kellogg, Boston, 19 Bay State Rd.
R. I. Lee, Boston, 264 Beacon St.
G. A. Leland, Boston, 144 Commonwealth Ave.
L. S. McKittrick, Sec., Boston, 205 Beacon St.
T. J. O'Brien, C., Boston, 501 Beacon St.
A. K. Paine, Boston, 80 Bay State Rd.
F. W. Palfrey, Boston, 311 Beacon St.
W. S. Parker, Boston, 472 Commonwealth Ave.
W. F. Regan, Boston, 19 Bay State Rd.
G. C. Shattuck, Boston, 520 Commonwealth Ave.
W. R. Sisson, Boston, 319 Longwood Ave.
Louisa Paine Tingley, Boston, 9 Massachusetts Ave.
G. L. Tobey, Jr., Boston, 270 Commonwealth Ave.
J. R. Torbert, Boston, 252 Marlborough St.
F. A. Washburn, Boston, Massachusetts General Hospital.
Conrad Wesselhoeft, Boston, 366 Commonwealth Ave.

WORCESTER

E. R. Leib, V. P., Worcester, 36 Pleasant St.
J. C. Austin, Spencer, 176 Main St.
W. P. Bowers, Ex-Pres., Clinton, 264 Chestnut St.
L. R. Bragg, Webster, 260 Main St.
F. H. Clapp, North Grafton.
P. H. Cook, Worcester, 27 Elm St.
W. J. Delahanty, Worcester, 5 Trumbull Sq.
G. A. Dix, Worcester, 6 Ashland St.
G. E. Emery, Worcester, 340 Main St.
M. F. Fallon, Worcester, 390 Main St.
Homer Gage, C., Worcester, 8 Chestnut St.
J. J. Goodwin, Clinton, 199 Chestnut St.
David Harrower, M. N. C., Worcester, 13 Elm St.
E. L. Hunt, Worcester, Worcester City Hospital.
A. W. Marsh, Worcester, 690 Main St.
E. C. Miller, Sec., Worcester, 27 Elm St.
J. W. O'Connor, Worcester, 36 Pleasant St.
W. C. Seelye, Worcester, 390 Main St.
A. M. Shattuck, Worcester, 21 High St.
E. H. Trowbridge, Worcester, 36 Pleasant St.
F. H. Washburn, Holden, Main St.
R. P. Watkins, Worcester, 332 Main St.
S. B. Woodward, Ex-Pres., Worcester, 58 Pearl St.

WORCESTER NORTH

R. A. Rice, V. P., Fitchburg, 21 Mechanic St.
F. R. Dame, Athol, 1302 Main St.
C. H. Jennings, Fitchburg, 82 Mechanic St.
A. F. Lowell, M. N. C., Gardner, 22 Vernon St.
F. M. McMurray, Sec., Fitchburg, 101 Prichard St.
H. R. Nye, Leominster, 19 Lancaster St.
W. F. Sawyer, Fitchburg, 67 Prichard St.

## CENSORS

BARNSTABLE

W. D. Kinney, Osterville, *Supervisor.*
J. H. Higgins, Marstons Mills.
E. E. Hawes, Hyannis.
C. E. Harris, Hyannis.
J. P. Nickerson, West Harwich.

BERKSHIRE

I. S. F. Dodd, Pittsfield, *Supervisor.*
M. H. Walker, Pittsfield.
M. S. Eisner, Pittsfield.
R. J. Carpenter, North Adams.
G. S. Wickham, Lee.

BRISTOL NORTH

F. A. Hubbard, Taunton, *Supervisor.*
T. F. Clark, Taunton.
A. R. Crandell, Taunton.
J. L. Murphy, Taunton.
T. J. Robinson, Taunton.

BRISTOL SOUTH

S. V. Merritt, Fall River, *Supervisor.*
D. D. Pratt, New Bedford.
F. M. Howes, New Bedford.
W. F. MacKnight, Fall River.
D. P. O'Brien, New Bedford.

ESSEX NORTH

F. S. Smith, North Andover, *Supervisor.*
E. P. Laskey, Haverhill.
John Parr, Methuen.
C. F. Warren, Amesbury.
R. S. Toppan, Newburyport.

ESSEX SOUTH

J. F. Jordan, Peabody, *Supervisor.*
G. E. Tucker, Salem.
A. E. Parkhurst, Beverly.
C. A. Worthen, Lynn.
Hanford Carvel, Gloucester.

FRANKLIN

R. A. McGillicuddy, Turners Falls, *Supervisor.*
H. M. Kemp, Greenfield.
J. W. Cram, Colrain.
J. C. O'Brien, Greenfield.

HAMPDEN

M. W. Harrington, Indian Orchard, *Supervisor.*
A. J. Douglas, Westfield.
E. P. Bagg, Jr., Holyoke.
G. L. Gabler, Holyoke.
J. A. Seaman, Springfield.

HAMPSHIRE

A. J. Bonneville, Hatfield, *Supervisor.*
E. H. Copeland, Northampton.
C. H. Wheeler, Haydenville.
L. B. Pond, Easthampton.
E. W. Brown, Northampton.

MIDDLESEX EAST

C. E. Ordway, Winchester, *Supervisor.*
F. F. Pike, Melrose.
J. M. Wilcox, Woburn.
J. H. Kerrigan, Stoneham.
F. O. West, Woburn.

MIDDLESEX NORTH

M. L. Alling, Lowell, *Supervisor.*
W. F. Ryan, Lowell.
C. S. Baker, Lowell.
J. J. Cassidy, Lowell.
J. E. Lamoureux, Lowell.

MIDDLESEX SOUTH

F. R. Jouett, Cambridge, *Supervisor.*
J. A. McLean, West Somerville.
Dwight O'Hara, Waltham.
H. F. Keever, Auburndale.
T. E. Reilly, Marlborough.

NORFOLK

J. S. H. Leard, West Roxbury, *Supervisor.*
J. S. May, Roxbury.
H. K. Boutwell, Brookline.
E. P. Ruggles, Dorchester.
G. W. Winchester, Milton.

NORFOLK SOUTH

C. S. Adams, Wollaston, *Supervisor.*
O. H. Howe, Cohasset.
F. A. Bartlett, Quincy.
C. J. Lynch, Quincy.
J. H. Ash, Quincy.

PLYMOUTH

J. P. Shaw, Brockton, *Supervisor.*
L. A. Baker, Middleboro.
R. B. Rand, North Abington.
A. W. Carr, Bridgewater.
Charles Hammond, Hanover.

SUFFOLK

F. W. Palfrey, Boston, *Supervisor.*
A. K. Paine, Boston.
Horace Binney, Boston.
G. L. Tobey, Jr., Boston.
Gerald Blake, Boston.

WORCESTER

G. A. Dix, Worcester, *Supervisor.*
B. H. Alton, Worcester.
R. S. Perkins, Worcester.
M. B. Fox, Worcester.
Winifred M. Grant, Worcester.

WORCESTER NORTH

W. F. Sawyer, Fitchburg, *Supervisor.*
George Mossman, Gardner.
A. A. Wheeler, Leominster.
T. R. Donovan, Fitchburg.
F. H. Thompson, Jr., Fitchburg.

## COMMISSIONERS OF TRIALS
### 1931-1932

BARNSTABLE—F. O. Cass, Provincetown.
BERKSHIRE—B. W. Paddock, Pittsfield.
BRISTOL NORTH—C. S. Holden, Attleborough.
BRISTOL SOUTH—A. C. Lewis, Fall River.
ESSEX NORTH—J. E. Bryant, Haverhill.
ESSEX SOUTH—J. E. Simpson, Salem.
FRANKLIN—
HAMPDEN—J. M. Birnie, Springfield.
HAMPSHIRE—C. A. Byrne, Hatfield.
MIDDLESEX EAST—M. B. Raynes, Melrose.
MIDDLESEX NORTH—H. W. Jewett, Lowell.
MIDDLESEX SOUTH—E. P. Stickney, Arlington.
NORFOLK—H. F. R. Watts, Dorchester.
NORFOLK SOUTH—N. S. Hunting, Quincy.
PLYMOUTH—W. M. Stevenson, North Easton.
SUFFOLK—Channing Frothingham, Boston.
WORCESTER—W. P. Bowers, Clinton.
WORCESTER NORTH—H. R. Nye, Leominster.

## OFFICERS OF THE DISTRICT MEDICAL SOCIETIES

ELECTED BY THE DISTRICT MEDICAL SOCIETIES AT THEIR ANNUAL MEETINGS, BETWEEN APRIL 15 AND MAY 15, 1932

(The street addresses may be obtained from the Annual Directory.)

BARNSTABLE—*President*, G. H. Gray, Hyannis; *Vice-President*, J. L. Chute, Osterville; *Secretary*, J. I. B.

Vail, Hyannis; *Treasurer*, H. B. Hart, Yarmouth Port; *Librarian*, E. E. Hawes, Hyannis.

BERKSHIRE—*President*, A. C. England, Pittsfield; *Vice-President*, M. H. Walker, Jr., Pittsfield; *Secretary*, H. J. Downey, Pittsfield; *Treasurer*, C. T. Leslie, Pittsfield.

BRISTOL NORTH—*President*, B. M. Latham, Mansfield; *Vice-President*, F. V. Murphy, Attleborough; *Secretary*, C. B. Kingsbury, Taunton; *Treasurer*, J. V. Chatigny, Taunton.

BRISTOL SOUTH—*President*, J. M. Salles, New Bedford; *Vice-President*, J. H. Lindsey, Fall River; *Secretary*, Charles Shanks, New Bedford; *Treasurer*, Charles Shanks, New Bedford.

ESSEX NORTH—*President*, O. P. Mudge, Amesbury; *Vice-President*, F. H. Coffin, Haverhill; *Secretary*, E. S. Bagnall, Groveland; *Treasurer*, E. S. Bagnall, Groveland; *Librarian*, A. M. Hubbell, Haverhill.

ESSEX SOUTH—*President*, C. L. Curtis, Salem; *Vice-President*, C. L. Hoitt, Lynn; *Secretary*, R. E. Stone, Beverly; *Treasurer*, Andrew Nichols III, Danvers; *Librarian*, C. M. Cobb, Lynn.

FRANKLIN—*President*, A. E. Johnson, Jr., Greenfield; *Vice-President*, H. B. Marble, Shelburne Falls; *Secretary*, Charles Moline, Sunderland; *Treasurer*, Charles Moline, Sunderland.

HAMPDEN—*President*, F. H. Allen, Holyoke; *Vice-President*, J. Z. Naurison, Springfield; *Secretary*, H. L. Smith, Springfield; *Treasurer*, H. L. Smith, Springfield.

HAMPSHIRE—*President*, M. E. Cooney, Northampton; *Vice-President*, J. D. Collins, Northampton; *Secretary*, F. E. O'Brien, Haydenville; *Treasurer*, F. E. O'Brien, Haydenville; *Librarian*, Jane B. Armstrong, Northampton.

MIDDLESEX EAST—*President*, E. M. Halligan, Reading; *Vice-President*, E. E. Tyzzer, Wakefield; *Secretary*, A. R. Cunningham, Winchester; *Treasurer*, Richard Dutton, Wakefield; *Librarian*, J. M. Wilcox, Woburn.

MIDDLESEX NORTH—*President*, Pierre Brunelle, Lowell; *Vice-President*, B. H. Pillsbury, Lowell; *Secretary*, T. A. Stamas, Lowell; *Treasurer*, M. D. Bryant, Lowell; *Librarian*, P. J. Meehan, Lowell.

MIDDLESEX SOUTH—*President*, F. W. Gay, Malden; *Vice-President*, A. H. Blake, West Somerville; *Secretary*, A. A. Levi, Cambridge; *Treasurer*, Edward Mellus, Newton.

NORFOLK—*President*, S. F. Curran, Dorchester; *Vice-President*, A. S. Begg, West Roxbury; *Secretary*, F. S. Cruickshank, Roslindale; *Treasurer*, G. W. Kaan, Sharon.

NORFOLK SOUTH—*President*, W. J. McCausland, Quincy; *Vice-President*, F. A. Bartlett, Quincy; *Secretary, Treasurer and Librarian*, N. R. Pillsbury, South Braintree.

PLYMOUTH—*President*, C. G. Miles, Brockton; *Vice-President*, D. B. Tuholski, Brockton; *Secretary*, G. A. Moore, Brockton; *Treasurer*, A. C. Smith, Brockton; *Librarian*, J. H. Weller, Bridgewater.

SUFFOLK—*President*, W. H. Robey, Boston; *Vice-President*, J. H. Means, Boston; *Secretary*, L. S. McKittrick, Boston; *Treasurer*, John Rock, Boston.

WORCESTER—*President*, E. R. Leib, Worcester; *Vice-President*, W. C. Seelye, Worcester; *Secretary*, E. C. Miller, Worcester; *Treasurer*, E. T. Disbrow, Worcester; *Librarian*, A. C. Getchell, Worcester.

WORCESTER NORTH—*President*, R. A. Rice, Fitchburg; *Vice-President*, C. E. Thompson, Gardner; *Secretary*, F. M. McMurray, Fitchburg; *Treasurer*, F. H. Thompson, Jr., Fitchburg.

# NEW HAMPSHIRE MEDICAL SOCIETY

## HOUSE OF DELEGATES*

### Continued May 16, 1932

PRESIDENT WILKINS offered the following amendment to the By-Laws:

**That Section 2, Chapter IX of By-Laws be changed to read "This committee shall be constituted as follows: the President and the Secretary-Treasurer of the Society and a member from each county society."**

Referred to Committee on Amendments to Constitution and By-Laws.

Dr. John G. W. Knowlton, Rockingham County, and Dr. D. W. Parker, Hillsborough County, in behalf of their respective County Societies, presented the following resolution:

*Resolved:* **That the delegates be instructed to recommend to the State Society, that any member of said Society not a party to the group plan of medical defense, sponsored by said Society, is not entitled to its protection.**

Referred to Committee on Amendments to Constitution and By-Laws.

Upon motion of Dr. Kenneth Churchill, Grafton County, duly seconded, it was

*Voted:* To make Dr. Charles B. Drake, West Lebanon, and Dr. Frank A. Smith, Lebanon, Affiliate Members, upon request of Grafton County Medical Society and in compliance with constitutional requirements.

The subject of liability insurance was brought up for discussion by Dr. D. W. Parker and was extensively discussed by President Wilkins and Drs. D. G. Smith, John G. W. Knowlton, D. L. Stokes, Richard W. Robinson, and Paul Dye.

The Secretary announced the receipt of a report on maternal mortality in New Hampshire, 1927-28, and, upon motion, duly seconded, it was

*Voted:* To refer the same to the Committee on Memorials and Communications.

*Voted:* To adjourn to 8:30 A. M. Tuesday, May 17.

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SECOND MEETING, TUESDAY, MAY 17

The meeting was called to order by the Speaker at 8:30 A.M.

The roll was called by the Secretary-Treasurer and 15 Delegates were present, constituting a quorum.

The minutes of the last meeting were read by the Secretary, and, upon motion duly seconded, it was

*Voted:* To approve the minutes as read.

*Continued from page 1150, issue of June 2, 1932.

The Speaker appointed the following Committee on Nominations:

D. W. Parker, Hillsborough County.
H. C. Sanders, Jr., Sullivan County.
Kenneth Churchill, Grafton County.
J. A. Ferguson, Coos County.
Fred Fernald, Rockingham County.

A recess was taken to 9:20 A.M.

(After recess.)

*Report of Committee on Officers' Reports.*

1. *Report of the Secretary-Treasurer.*

**We believe that the matter of affiliate members is covered by the constitution and we recommend that it be interpreted to mean that they have the full privileges of members of this society.**

**We deem it unnecessary to change the by-laws in respect to the non-payment of dues.**

**We agree with the recommendation that the Committee on Lay Organizations should be made a standing committee and we suggest that this recommendation be referred to the Committee on Revision of the Constitution and By-Laws.**

**We do not believe that the method of electing our officers should be changed.**

**We recommend the continuance of our Committee on Control of Cancer for, in addition to its other good work, it should function as the contact agent of this society with the New Hampshire Cancer Commission.**

**We recommend that the activities of our Committee on Public Relations, Public Policy and Legislation be extended to include national affairs.**

**We commend the Secretary-Treasurer for his valuable report and recommend its acceptance and incorporation into the transactions of this society.**

2. *Report of the Necrologist.*

**We recommend the acceptance of this report and its incorporation into the transactions of this society. We also recommend the same for the following:**

3. *Report of the Delegate to the New England Medical Council.*
4. *Reports of the Delegate to the A. M. A. for 1931 and 1932.*
5. *Report of the Committee on Scientific Work.*
6. *Report of the Committee on Publications.*
7. *Report of the Committee on Medical Education and Hospitals.*
8. *Report of the Committee on the Control of Cancer.*

**We approve of the good work that this Committee is doing. We recommend that its deficit be made up and that its request for an appropriation of $75.00, to continue its work, be granted. We urge it to continue its coöperation with the New Hampshire Cancer Commission.**

Upon motion of Dr. D. W. Parker, duly seconded, it was

*Voted:* To adopt the first recommendation, relating to Affiliate Members.

President Wilkins then moved adoption of all other recommendations in said report, to which Secretary Sullivan moved an amendment—that all parts thereof relating to amendments of By-Laws be referred to the Committee on Amendments to Constitution and By-Laws. The Speaker ruled that this amendment was covered by the original motion. Said motion being duly seconded, it was

*Voted:* To adopt the remaining recommendations in said report.

It was voted to adopt the report as a whole.

*Report of Committee on Public Relations, Public Policy, and Legislation.*

Your committee had no business to come before it, and therefore no meetings were called.

It is the sense of opinion, however, of this committee that another effort should be made in our General Court to amend the Lien Law, the Act in relation to the Practice of Medicine and amend House Bill 284, Laws of 1930, so as to include other incurable diseases such as were included in Mr. Ahern's Bill of the past session.

(Signed)
S. T. Ladd,
H. O. Smith,
O. H. Hubbard,
D. E. Sullivan,
James W. Jameson.

Referred to Committee on Officers' Reports.

*Report of Tuberculosis Committee.*

This year we are venerating the memory of the man who fifty years ago, on March 24, 1882, announced that he had discovered the cause of tuberculosis.

The medical world and all thinking people know that Dr. Koch's discovery of the germ cause of the disease has saved millions of lives and averted untold human sorrow and tragedy.

Dr. Koch pointed out the basic foundation for the prevention of tuberculosis. In his paper on "The Aetiology of Tuberculosis" read before the Berlin Medical Society he said that in order to prevent tuberculosis we must "shut off the source from whence the infective material comes insofar as it is in the power of man to do so."

Following in his steps, the medical profession has brought about a world-wide program for the prevention of the disease. Your knowledge and sponsorship have brought about the essentials of the campaign such as examination of sputum for tuberculosis germs, the establishment of sanatoria for segregation and cure of the afflicted, the campaigns for early diagnosis and education of the people as to the early symptoms and means of prevention and cure.

You and other members of the organized medical profession have reduced the toll of tuberculosis from the leading cause of death in the country fifty years ago to the sixth place at the present time.

Yet the medical profession is aware of the fact that after fifty years of progress, the disease is still the leading cause of death in the age group 15 to 45 and still causes tremendous social and economic disaster.

The great obstacle to complete success in the prevention of the disease rests in the qualifying statement of Dr. Koch:—"shut off the source from which the infective material comes—*insofar as it is in the power of man to do so.*"

The difficulties of early diagnosis and of adequate supervision for large numbers of people ill for months and often years with an infectious disease which is not seriously disabling are inherent in that statement "insofar as it is in the power of man to do so." Also the important matter of social and economic well-being of the great masses of the people cannot be separated from the tuberculosis problem.

It might be of profit for your committee to summarize some of the newer steps in the program of prevention and cure.

More emphasis is now being placed upon the examination of all "contacts" with a tuberculosis patient. We do not concern ourselves wholly with the tuberculous patient. As a rule he is at least moderately advanced before his symptoms cause him to seek a diagnosis. The equally important objective is to find the men, women and especially children who have been in contact with the sick patient. Here are to be found the real incipient cases, and here is the hope for cure and prevention. We have sought the assistance of members of the medical profession of the State in this important procedure and it has been given most generously.

As to newer procedures in diagnosis: Here we are seeing a revolutionary change for the x-ray is assuming a large place in our early diagnosis of tuberculosis. Some authorities believe that it has proved to be the instrument of precision in the diagnosis of the earliest tuberculosis manifestations and that the stethoscope is in comparative eclipse. Others insist that the x-ray is of tremendous assistance, particularly in the matter of searching out non-tuberculosis chest conditions. Certainly the x-ray is of great assistance, not only in the diagnosis of the earliest tuberculosis lesions, but in the matter of check-up on cases particularly as it reflects advance of the process, or absorption and fibrosis.

As to newer ideas in treatment: Rest still continues the prime essential in arrest of the tuberculous process. Sunlight is beneficial but the dose must be graded, and direct exposure of the bare chest to the sunlight for active cases is often harmful. Artificial pneumothorax taken up with considerable enthusiasm about fifteen years ago, then lapsing in use to a considerable extent—is again assuming a newer prominence and wider use. Cutting of the phrenic nerve to raise the diaphragm and thoracoplasty to collapse the chest wall are not new, but the larger use of these procedures is new and the results more and more convincing.

Most encouraging of all is the newer light on tuberculosis in children. The vast amount of research in this connection is bearing fruit and we are accumulating considerable information as to the distinctions between the disease in the adult and in the child. Symptoms in the child may be absent or slight and no single symptom is pathognomonic. It is the collaboration of history, physical examination and x-ray which makes a diagnosis possible. The importance of x-ray in the childhood type cannot be over-emphasized.

The economic conditions of the past two years are causing concern to all thoughtful students of the tuberculosis program. The evidence up to the present time does not indicate that these conditions have caused any serious increases in the prevalence or death rate from the disease. There is increased demand for sanatorium treatment, a slight increase in numbers of active cases reported and many children and families are now upon a standard of living which is only sufficient to maintain life. It is difficult to conceive that these conditions will not be reflected in the morbidity and mortality from tuberculosis.

That the active interest of the medical profession is needed now more than ever is apparent. We ap-

preciate the generous coöperation which has been extended to us by the members of the Society during the past year. We ask your continued interest and aid.

ROBERT B. KERR, Manchester,
ROBERT M. DEMING, Glencliff,
ARTHUR L. WALLACE, Nashua.

Referred to Committee on Publications.

*Report of Committee on Mental and Social Hygiene.*

The mental and social hygiene work in the state as outlined in the last report has been maintained.

This year the Commissioner of Education obtained the services of Dr. S. W. Hartwell of the Worcester, Massachusetts, Mental Hygiene Clinic to lecture at the spring school teachers' conference as an aid to the educators of the State in understanding and interpreting the emotions of children and their effects on child behavior. As all of the children in New Hampshire spend a greater part of their time under the influences of our teachers the importance of the understanding of the child's emotions by the teacher is apparent, and more of this type of teacher education is recommended.

Routine occupation is a great physical, mental and emotional stabilizer. At the present time so many have been deprived of this stabilizing influence that there is evident, not only in New Hampshire but throughout our country, an increase in mental and nervous disturbances, behavior reactions and personality maladjustments.

Since the last report every state and county institution has been urged to accept increasing numbers until all state and county facilities are taxed to their utmost. This situation is accentuated not only by the fears and anxieties which are undermining individual and family security, but by the economic inability of the community to receive placements or returns today from the institutions.

These conditions combined with the demands for administrative economy will render it increasingly difficult to maintain high standards of care and treatment. Those in New Hampshire qualified to give mental and social hygienic advice are so few, so occupied with other work, and there are so few voluntary funds available for community mental health service that the outlook for any advancement in mental and social preventive medicine is not at this date very encouraging.

BENJAMIN W. BAKER, *Chairman*,
CHARLES H. DOLLOFF,
HENRY W. N. BENNETT.

Referred to Committee on Publications.

Upon motion duly made and seconded,

*Voted:* To adjourn to 8:30 A.M., Wednesday, May 18.

THIRD MEETING, WEDNESDAY, MAY 18, 1932

The meeting was called to order by the Speaker at 8:30 A.M. and on rollcall a quorum was declared present.

The minutes of the last meeting were read and approved.

*Report of Committee on Nominations.*

*President*

Harry O. Chesley, Dover
Fred P. Claggett, Newport
Edward R. B. McGee, Berlin

*Vice-President*

Robert J. Graves, Concord
Fred Clow, Wolfeboro
George S. Emerson, Fitzwilliam

*Speaker to the House of Delegates*

Eugene B. Eastman, Portsmouth

*Vice-Speaker of the House of Delegates*

Carleton R. Metcalf, Concord

*Councilor*

Coos County for 5 years, Richard E. Wilder, Whitefield
Carroll County for 5 years, Charles E. Smith, Conway
Trustee for three years, Alpha H. Harriman, Laconia

*Necrologist*

Clarence E. Dunbar, Manchester

*Standing Committees*

Scientific Work

Secretary-Treasurer
Richard W. Robinson, Laconia
Frederick P. Scribner, Manchester

Public Relations, Public Policy and Legislation
Samuel T. Ladd, Portsmouth, *Chairman*
Charles Duncan, Concord
Henry O. Smith, Hudson

Publication

Secretary-Treasurer
Henry H. Amsden, Concord
Raymond H. Marcotte, Nashua

Tuberculosis
Robert B. Kerr, Manchester, *Chairman*
Robert M. Deming, Glencliff
Arthur L. Wallace, Nashua

Mental and Social Hygiene
Charles A. Weaver, Manchester
Benjamin W. Baker, Laconia
Charles H. Dolloff, Concord

Lay Health Organizations
Carleton R. Metcalf for five years

Control of Cancer
George C. Wilkins, Manchester
Howard N. Kingsford, Hanover
George F. Dwinell, Manchester

Amendments to Constitutions and By-Laws
Henry O. Smith, Hudson
Fred E. Clow, Wolfeboro
Thomas W. Luce, Portsmouth

Delegate to Council on Medical Education and Hospitals, A. M. A.
Appointed by the President

Delegate to Bureau of Health and Public Instruction, A. M. A.
Ralph E. Miller, Hanover

Anniversary Chairman
Appointed by the President

On motion, duly seconded, it was

*Voted:* To accept the report of Committee on Nominations.

*Election of Officers.*

The Speaker appointed Dr. Charles H. Parsons, Merrimack County, and Dr. A. C. Johnson, Coos County, as tellers.

Upon motion of Dr. Henry C. Sanders, Jr., duly seconded, it was

*Voted:* That the Secretary cast one ballot for Dr. Harry O. Chesley, Dover, as president.

The Secretary having cast one ballot as directed, the Speaker announced Dr. Harry O. Chesley elected as President of the Society for the ensuing year.

The meeting then proceeded to the election of a Vice-President. Dr. John G. W. Knowlton moved that the Secretary cast one ballot for Dr. Robert J. Graves, but upon objection by President Wilkins said motion was withdrawn. The tellers then proceeded to collect, sort and count the ballots and the following result was announced:

Total number of votes cast 18; Dr. George S. Emerson received 1, Dr. Fred E. Clow received 7, and Dr. Robert J. Graves received 10, and Dr. Graves was declared duly elected Vice-President of the Society for the ensuing year.

Upon motion of Dr. D. G. Smith, duly seconded, it was

*Voted:* That the Secretary cast one ballot for the election of the remaining officers as presented by the Committee on Nominations.

The Secretary, having cast one ballot as directed, the Speaker announced the election of the nominees to their respective offices for the term designated in the report of the Committee.

*Supplemental Report of Committee on Public Relations, Public Policy, and Legislation.*

We recommend the adoption of the following resolution:

We protest against the multiplication of hospitals designed largely for the care and treatment of ex-service men suffering from diseases contracted since their discharge from the service and recommend that the facilities offered by existing civilian hospitals be more largely utilized.

We further recommend that copies of this resolution be sent to our representatives in Congress.

Upon motion of Dr. Paul Dye, duly seconded, it was

*Voted:* To adopt said report.

*Report of Committee on Communications and Memorials.*

(1) Legislation for the welfare of Rural Population, to help mothers and children:

We recommend that this Society should go on record, as opposed to any such legislation, paternalistic in character, and infringing on States Rights.

(2) The A. M. A. recommendation for the establishment of medico-legal agencies or bureaus of investigation for the detection of crimes.

This committee of course approves these recommendations, but believes that this State is well protected by its established agencies at the State Capitol.

(3) Medicinal Liquors:

We approve of the work being done, in order to bring about the liberalization of the rules regulating the use of prescriptions.

(4) Retainers to Lawyers:

We recommend that the request of a retainer fee by Lawyer Sulloway of Concord be denied.

T. F. Rock,
Charles H. Parsons,
Pierre Bergeron,
*Committee on Memorials and Communications.*

On motion of Secretary Sullivan, duly seconded, it was

*Voted:* That the report of the Committee on Communications and Memorials be voted on section by section.

The first recommendation in said report, relating to Welfare of Rural Population, was read by the Speaker, and, upon motion by Dr. Richard W. Robinson, duly seconded, it was

*Voted:* That the recommendation be adopted, with the amendment that the State's representatives in Congress be notified of the action of the Society.

The Speaker read the second recommendation, relating to establishment of medico-legal agencies or bureaus of investigation for the detection of crimes, and, upon motion of Dr. Pierre Bergeron, duly seconded, it was

*Voted:* To accept said recommendation.

The third recommendation of the Committee, relating to medicinal liquors, was read by the Speaker, and, upon motion of Dr. Richard W. Robinson, duly seconded, it was

*Voted:* To accept said recommendation.

The Speaker then read the fourth recommendation, relating to retainers to lawyers, and a long discussion ensued, participated in by Dr. D. W. Parker, Dr. Thomas W. Luce, President Wilkins, the Secretary, and several other delegates, and, upon motion by President Wilkins, duly seconded, it was

*Voted:* Not to accept said recommendation.

It was voted to accept the report as a whole excepting the fourth recommendation.

Dr. George C. Wilkins offered the following motion:

That a Committee of three be appointed by the President to take up the relations between the New Hampshire Medical Society, the insurance company and counsel, to consider all matters pertaining to medical defense. This committee shall have power to make arrangements and agreements as advantageous as possible to the Medical Society.

On motion, duly made and seconded, it was

*Voted:* To amend the motion of President Wilkins by the addition of the Secretary-Treasurer ex-officio to the committee of three.

The question then came on the original motion as amended, and the same was carried without dissent.

On motion of Dr. A. C. Johnston, duly seconded, it was

*Voted:* To instruct said Special Committee not to pay the two bills presented by counsel.

*Report of Committee on Amendments to Constitution and By-Laws.*

We recommend:

1. That Chapter VIII, Section 1, of the By-Laws be amended by inserting after the words, "A Committee on Scientific Work," the words, "A Committee on Lay Health Organizations."
2. Chapter VIII, new Section 3: "The Committee on Lay Health Organizations shall consist of five members whose term of service shall be so arranged that after its inception, one member shall be elected annually for a term of five years.
3. Chapter VIII, Sections 3 to 10, inclusive, be renumbered, 4 to 11.
4. That no change be made in Chapter IX, Section 2, relating to the constitution of the membership of the Advisory Committee on Jurisprudence.
5. We believe that the adoption of proposed Chapter XI is inexpedient at this time.

HENRY O. SMITH,
FRED E. CLOW,
THOMAS W. LUCE.

The Speaker announced that said report would be considered section by section and read the first section.

On motion of Secretary Sullivan, duly seconded, it was

*Voted:* To adopt the first section.

The second section on motion made and duly seconded, was adopted.

The third section on motion of the Secretary-Treasurer, duly seconded, was adopted.

On motion duly made and seconded the fourth section was adopted.

The fifth section was read by the Speaker, and, there being no further time for consideration of the question, it was

*Voted:* To recess, to reassemble at the close of the morning session.

(After recess.)

The delegates reassembled at 12:45 P. M. and renewed discussion on the fifth section of the Report of the Committee on Amendments to the Constitution and By-Laws, relating to the adoption of a proposed new Chapter XI.

The Speaker called upon Dr. Henry O. Smith, Chairman of said committee, to explain the section.

The Secretary-Treasurer moved that said section be not adopted. Discussion ensued, and it was

*Voted:* That the fifth section be not adopted.

It was moved and seconded that said new Chapter XI amendment to the By-Laws be adopted, substituting the sum of 50 cents for $1. After discussion it was

*Voted:* To adopt said amendment to the By-Laws, Chapter XI, substituting the sum of 50 cents for $1.

It was voted to adopt the report as a whole, as amended.

*Further Report of Committee on Officers' Reports.*

*Report of Committee on Public Relations, Public Policy, and Legislation*

We recommend the acceptance of this report and its incorporation into the transactions of this society. We agree that another effort should be made to amend the lien law, but believe it inadvisable to attempt to amend the law that established the cancer commission.

*Report of the Advisory Committee on Jurisprudence*

We wish again to express our appreciation of the excellent work that this committee is doing.

*Report of the Delegate to the Bureau of Health and Public Instruction A. M. A.*

We recommend that no money be appropriated at this time for the expenses of this delegate.

*President's Address*

This admirable address is most timely, summarizing as it does the present status of the medical profession in this state, and making many very constructive suggestions.

We recommend that each member of this society study the address and endeavor to carry into effect its excellent ideas. We especially recommend that the Committee on Medical Education and Hospitals be asked to make a careful study of the question of the control or licensing of hospitals and working with the Committee on Public Relations, Public Policy and Legislation, take such action as is deemed advisable to bring about better supervision of hospitals.

We agree that all cancer activities should be coördinated, and we recommend that this society and its members do not support any activity not approved by its Committee on the Control of Cancer.

We further recommend that each County society at an early meeting, discuss the suggestions made in this address, and instruct its delegates as to the action they should take in regard to these suggestions, especially those concerning insurance and the benevolence fund.

The Speaker announced that consideration of this report was to be taken up section by section.

Upon motion of President Wilkins, duly seconded, it was

*Voted:* To adopt the first section.

On motion of the Secretary-Treasurer, duly seconded, it was

*Voted:* To adopt the second section.

On motion of President Wilkins, duly seconded, it was

*Voted:* To adopt the third section.

The section, relating to President's Address, on motion of Dr. Richard W. Robinson, duly seconded, was adopted.

The fifth section, relating to cancer activities, on motion of Dr. T. F. Rock, duly seconded, was adopted.

The sixth section relating to discussions at meetings, on motion duly seconded, was adopted.

*Voted:* To adopt the report as a whole.

*Report of Councilor.*

STRAFFORD COUNTY

As Councilor of Strafford County Medical Society I submit the following report:

President, George C. Rublee, Rochester.
Vice-President, H. E. Anderson, Somersworth.
Secretary-Treasurer, E. G. Marcotte, Dover.
Auditor, R. J. Bennett, Dover.
Censor, A. E. Grant, Durham.
Delegate two years, T. J. Morrison, Somersworth.
Delegate Alternate, L. W. Flanders, Dover.

The annual meeting was held at the City Hotel, Rochester, Oct. 22, 1931, with a large attendance. Addresses were made by the President of the New Hampshire Medical Society, Dr. G. C. Wilkins, and by the Secretary of the New Hampshire Society, Dr. D. E. Sullivan. The scientific program on obstetrics by Dr. D. Bristol of Boston and Dr. Chester McGill of Portsmouth was generously discussed.

The mid-year meeting was held at the American House, Dover, May 4, 1932. The scientific program: Dr. H. M. Clute of the Lahey Clinic, Boston, "The Indications for Surgery in Ulcer of the Stomach and Duodenum"; Dr. A. H. Ring of the Ring Sanatorium, Arlington, Mass., "Psychoses."

There have been three deaths and four new members during the year. We believe the society to be in a flourishing condition.

J. A. HUNTER, *Councilor.*

*New Business.*

On motion of Dr. D. G. Smith:

*Voted:* That the Speaker of the House of Delegates shall appoint, by January 1 of each year, the Committee on Officers' Reports and the Committee on Memorials and Communications. These committees shall report at the first session of the House of Delegates. All reports of other committees and officers shall, if possible, be given to the Secretary-Treasurer of the Society at least four weeks in advance of the annual meeting. These reports and all pertinent communications shall be delivered at once by the Secretary-Treasurer to the respective committees.

Dr. Charles F. Keeley discussed the advisability of calling a session of the House of Delegates at least once before the annual meeting and moved that such second session be held in October of each year. A general discussion ensued, and Dr. Keeley then made the motion, duly seconded, and it was

*Voted:* That in the opinion of the House of Delegates there should be an interim meeting at the call of the President, the time and place to be selected by him.

Vice-President Chesley asked, as an evidence of goodwill, that a rising vote be taken of those delegates who would be willing to attend such interim meetings each year. All present rose.

*Report of the Council.*

At a meeting of the councilors, it was recommended that the matter of charges of unprofessional conduct against a member of Coos County Medical Society be referred to said County Society for investigation, formulation of charges and action regarding continuance of membership.

RICHARD E. WILDER, *Chairman,*
H. H. AMSDEN, *Secretary.*

Dr. Henry C. Sanders, Jr., raised the question of alleged doctors' contracts to effect cures, referring particularly to a recent decision of the Supreme Court. A general discussion ensued, and, upon motion of Dr. Charles F. Keeley, duly seconded, it was

*Voted:* That this matter be referred to the Judicial Department of the American Medical Association for action through the Advisory Committee on Medical Jurisprudence.

Upon motion of the Secretary-Treasurer, it was

*Voted:* That the thanks of the Society be extended to the Hillsborough County Medical Society, the State Board of Health, to the exhibitors and all others contributing to the success of this meeting.

Upon motion of Dr. Frank Dinsmoor, duly seconded, it was

*Voted:* To hold the next meeting at Manchester, the time of said meeting to be left to the discretion of the Secretary-Treasurer.

On motion of Dr. T. F. Rock, it was

*Voted:* To adjourn.

Adjourned, at 1:45 P. M., *sine die.*

## RECENT DEATHS

**MORRISON**—DR. GEORGE H. MORRISON, Whitefield, died May 27 at his home.

**CILLEY**—DR. ARTHUR H. CILLEY, 120 East 34th Street, New York City, died May 31 of pneumonia. He had been a member of the New Hampshire Medical Society for the past twenty years.

**LAMBLY**—DR. WILLIAM O. LAMBLY, Lebanon, died May 17.

## NEWS ITEMS

Dr. Edward G. Marcotte, Dover, has been elected Secretary-Treasurer of Strafford County Medical Society to succeed Dr. Harry O. Chesley, newly elected President of the State Society.

Dr. Leslie K. Sycamore, Hanover, has been elected Secretary-Treasurer of Grafton County Medical Society, succeeding Dr. F. P. Lord, resigned. Dr. Lord has been granted a sabbatical year by Dartmouth and will enjoy a much needed rest in Europe.

# VERMONT STATE MEDICAL SOCIETY

## VERMONT DEPARTMENT OF PUBLIC HEALTH

MAY, 1932

The incidence of communicable disease during the month of May is as follows: Chicken pox 111, diphtheria 2, measles 1,355, mumps 583, scarlet fever 53, typhoid fever 1, smallpox 26, undulant fever 1, whooping cough 89 and tuberculosis 9.

The Laboratory of Hygiene did a total of 1,417 examinations, classified in the following manner:

| Examination | |
|---|---|
| For diphtheria bacilli | 86 |
| For Widal reaction of typhoid fever | 24 |
| For tubercle bacilli | 240 |
| For evidence of syphilis | 424 |
| For gonococci in pus | 120 |
| Of water, chemical and bacteriological | 68 |
| Of water, bacteriological | 169 |
| Of milk, market | 189 |
| Of milk, submitted for chemical only | 8 |
| Of milk, submitted for microscopical only | 15 |
| Of foods | 13 |
| For the courts, autopsies | 3 |
| For the courts, miscellaneous | 13 |
| Miscellaneous | 43 |
| Autopsies to complete death returns | 2 |

Twenty-six new cases of gonorrhea and seventeen new cases of syphilis were reported to the Division of Communicable diseases. Four hundred and twenty-nine Wassermann outfits were distributed and 213 slides for gonorrhea were sent out.

The nurses of the Poliomyelitis After-care Division conducted the usual spring clinics during May, with attendance as follows: Poliomyelitis patients, 116 and non-polio, 69. Sales made by the vocational work of this division amounted to $85.75.

The nurse of the Maternity and Infancy Division has conducted classes for high school girls, on infant care in several towns of the state, and plans have been made with Home Demonstration Agents of the University Extension Service for clinics later in the season. The nurse assisted in several towns where children are being immunized against diphtheria.

## ADDISON COUNTY MEDICAL SOCIETY

A meeting of the Addison County Medical Society was held at the Porter Hospital in Middlebury, Wednesday, May 25. Dr. Edward Rogers, Director of the State Tuberculosis Sanitarium at Pittsford, addressed the Society upon the "Diagnosis of Tuberculosis," and exhibited a very large number of films of chests, from x-rays taken at the Sanitarium, illustrating many stages of tuberculous infection. There were several series of films of the same individuals showing the progress of the disease or of its recession under treatment, and several pictures of lungs therapeutically collapsed. Dr. Rogers gave the case history of each.

Seven members and three guests were present.

## WINDSOR COUNTY MEDICAL SOCIETY

The annual meeting of the Windsor County Medical Society was held May 27, 1932, at Adna Brown Hotel in Springfield, Vt. Luncheon was served at 1:00, sixteen members and guests being present. After luncheon the business meeting was held, A. B. Woodman, President, presiding and the following officers were elected for the ensuing year:

President—C. P. Munsell.
Vice President—W. M. Huntington.
Secretary and Treasurer—A. L. Patch.
Delegate for two years—B. A. Chapman; alternate—I. R. Doane.
Delegate for one year—A. L. Patch; alternate—A. M. Cram.
Censors—A. B. Woodman and A. C. Walker.

During the year we had one withdrawal and two members were admitted.

After the business meeting we had the pleasure of listening to a very interesting and well-delivered lecture by Dr. E. J. Rogers, of Pittsford, Vt., on "X-ray Diagnosis in Tuberculosis." Dr. Rogers showed many x-ray plates and it was the general opinion that his talk and demonstration were as fine as we had ever had and were enjoyed by all.

A. C. WALKER, *Secretary.*

# RECENT DEATH

**DOREY**—DR. PETER L. DOREY, aged 56, a practicing physician in Middlebury for about 28 years, died at his home on Court Street, June 17.

Dr. Dorey was born in Burlington, January 29, 1876, the son of Louis and Ellen Phalen Dorey. He attended the public schools at Underhill and graduated from the University of Vermont Medical College in 1904 and began practice in Middlebury.

Dr. Dorey was a past president of the Addison County Medical Society; a member of the American Medical Association, Vermont Medical Society, Porter Memorial Hospital Staff, Phi Chi Fraternity; fourth degree, Father Daley Council, Knights of Columbus, of which he was a past grand knight; Catholic Order of Foresters; Middlebury Rotary Club and Middlebury Chamber of Commerce. He was also a director of the Middlebury Hotel Corporation, the Middlebury Coöperative Savings and Loan Association and the Addison County Trust Company. He was a member of the school board, the Middlebury Country Club and St. Mary's Church. He was always active in village affairs.

Dr. Dorey leaves a son, Gerald L. Dorey, and five daughters, Muriel C., Patricia E., Lucille, and Ruth F. Dorey, all of Middlebury, and Alice P. Dorey; a sister, Mrs. Thomas Conway of Starksboro, and a brother, Charles S. Dorey of Middlebury.

# THE THIRD MEDICAL COLLEGE IN NEW ENGLAND, THAT OF BROWN UNIVERSITY (1811-1828)

BY FREDERICK C. WAITE, PH.D.‡

A HUNDRED years bring oblivion to events that are not occasionally recalled to public notice, and it is probable that few members of the present-day medical profession know of the medical school at Providence.

To Rhode Island belong several events of interest in the early medical history of New England. On September 14, 1641, by enactment, the Colonial Assembly authorized Robert Jeoffreys of Newport "to exercise the function of Chiurgerie". At that date Mr. Jeoffreys was also "exercising the function" of treasurer of the colony. This is one of the earliest of American medical licenses by legislative procedure. Five years before, in 1636, the Assembly at Hartford, Connecticut, had voted a similar license to Dr. Bray Rossiter.

With the accession of Charles II to the English throne, the Colony of Rhode Island and Providence Plantations received a new charter. The first Assembly under the new charter convened at Newport, March 1, 1663-64. In the early days of its session it passed the following special act:—

> "Wheras the Court hath taken notice of the great blessing of God on the good endevers of Captayne John Cranston of Newport, both in phissicke and chirurgery, to the great comfort of such as have had occation to improve his skill and practice etc. The Court doe therfore vnanimously enacte and declare that the said Captayne John Cranston is lycenced and commistioned to adminester phissicke, and practice chiurgery throughout this whole Collony and is by this court styled and recorded Doctor of phissicke and chirrurgery by the athority of this the Generall Assembly of this Collony."*

Arnold, in his History of Rhode Island†, considers this the first medical degree conferred in the Colonies. With this view some historians are not in full accord, interpreting the designation as a license rather than as a degree. A legislature can grant a charter to an educational institution, giving it the power to confer medical degrees. It is a truism that a principal has the power independently to do whatever it can delegate to an agent, hence this legislative assembly had the power to grant a medical degree. The question is as to what was the intent in this instance.

This Assembly had previously granted licenses, without going further, and styling the recipient as a Doctor. It seems likely that the Assembly of 1663 wished to do something extraordinary in this case since the recipient was already a prominent man in the Colony, and therefore, as the text of the act states, it "lycensed and commistioned" him to practice and in addition "styled and recorded" him as "Doctor of phissicke and chirrurgery," thus giving him an honorary degree in addition to the license.

John Cranston appears to have been skilled, not only in physic and chirurgery, but in arms and politics as well. He was born in England in 1626, the son of a clergyman who was related to the nobility, and who held a royal appointment under Charles I. At the age of twelve this youth came to Rhode Island. At eighteen he was elected drummer in the militia. At twenty-eight he was attorney general of the Colony, and at thirty-seven, when this degree was voted, he had served as appointed commissioner on important boundary decisions and the next year went as delegate of the Colony to the meeting of the United Colonies at Hartford. Nine years later, in 1672, he was made Deputy Governor, which post he held until 1678. In this time, in 1676, he was appointed commander-in-chief of the Colony's forces in King Philip's War. In 1678 he was elected Governor of the Colony, which post he held until his death, March 12, 1680.

Verily, this first man to receive a medical degree in America was a man of parts, being lawyer, physician, warrior, and statesman. His political acumen appears to have been inherited by his son, Samuel Cranston, who, beginning in 1698, was annually elected Governor of the Colony for thirty consecutive years, the longest gubernatorial term in American history.

John Cranston's medical degree, if such it be, was sixty years earlier than what is usually considered the earliest medical degree in the Colonies, the honorary degree of doctor of medicine given in 1723 by Yale College to Daniel Turner, a London physician and medical author who was never on this side of the Atlantic Ocean. This degree was granted in response to Mr. Turner's personal request, a request which was accompanied by a gift of several volumes of medical and scientific works to the library of Yale College.

Rhode Island, also, has the distinction of being the seat of the second, if not the first, formal group teaching in anatomy in America. William Hunter (1729-1777), a cousin of John and William Hunter, famous British anatomists and surgeons, studied medicine in Edinburgh and Leyden. In 1742 he came to Rhode Island and in 1754, 1755, and 1756 advertised in Boston papers that he gave courses of lectures on anat-

*Rhode Island Colonial Records, Vol. II, p. 33.

†Vol. I, p. 33.

‡Waite — Professor of Histology and Embryology, Western Reserve University. For record and address of author see "This Week's Issue," page 40.

omy at Newport, Rhode Island. He possessed the largest medical library in the New England of his day.

The only record we have of earlier instruction is contained in the writing of the Apostle Eliot in 1647, who says:—"We never had but one Anatomy in this Countrey which Mr. Giles Firmin (now in England) did make and read upon very well." Giles Firmin, clergyman and physician, came to Massachusetts in 1642. Some contend that all he did was to prepare a skeleton, but in Europe "making an anatomy" meant to dissect for the purpose of demonstrative lectures.

The first medical school in New England, and the third (or fourth)* in the United States, was that at Cambridge organized in 1782 under the charter of Harvard College. The second medical school in New England, and the fifth (or sixth)† within the United States, was that at Hanover, organized in 1798 under Dartmouth College. In October 1810 Middlebury College established a medical department, but it never came into operation.

The College of Rhode Island was chartered in 1764. In 1804 its name was changed to Brown University, as a mark of gratitude for a gift of five thousand dollars from Nathaniel Brown. Only two colleges in New England are older,—Harvard (1636), and Yale (1701).

The establishment of medical education at Brown in 1811 made this the third medical school in New England and the ninth in the United States. The leader in its organization was Dr. Solomon Drowne (1753-1834). He was a native of Providence and a graduate in arts at the College of Rhode Island in 1773, and received the degree of Bachelor of Medicine from the Medical Department of the College of Philadelphia in 1781. He served as an army surgeon in the Revolutionary War, and in 1780 on a private sloop-of-war. He won the regard of the French officers to the extent that the French chief of the medical staff entrusted their invalid soldiers to Dr. Drowne when the French left for home.

In 1784 Dr. Drowne studied in London and Paris. In 1788, as one of the proprietors of the Ohio Company, he spent a year in Marietta, Ohio. Next he resided in Virginia and then in Pennsylvania.

In 1801 Dr. Drowne settled at Foster, Rhode Island. He built a house on a hill, which he called Mount Hygeia, and established a botanical garden, where he grew many medicinal plants, including opium poppies, for use in his practice. Later, he initiated a small garden of medicinal plants on the university campus.

In 1804 Brown University conferred on him the honorary degree of Doctor of Medicine, the first medical degree conferred by that institution.

The first medical faculty consisted of Dr. Drowne as professor of materia medica and botany, Dr. William Ingalls as professor of anatomy and surgery, and Dr. William Corlis Bowen as professor of chymistry.

Dr. Ingalls (1769-1851) was a native of Newburyport, Massachusetts. He held three degrees from Harvard, namely A.B. (1790), M.B. (1794), and M.D. (1801). In 1813 Brown gave him an honorary M.D. He spent all his professional life in Boston, and gave private courses in anatomy for some years, on Cornhill Street. He was reputed to be a skillful surgeon.

Dr. Ingalls did not remove to Providence. His interest in the medical teaching there soon waned, and he required the students to go to Boston to take his lectures. In 1815 Dr. John Mathewson Eddy, who received an honorary degree of doctor of medicine from Brown in that year, was appointed adjunct professor of anatomy and surgery, and carried the instruction until his death in 1817. Dr. Ingalls offered his resignation in 1816, which was not accepted until 1823.

Dr. Bowen (1785-1815) was of a medical family through four generations. His great-great-grandfather began practice in Rhode Island in 1640 and his grandfather and father were prominent physicians. Dr. Bowen entered the College of Rhode Island, but graduated at Union College in 1803. He received his medical degree at Edinburgh in 1807, studied at Leyden and Paris, and in London was a private pupil of Sir Astley Cooper. He served as professor of chemistry on the medical faculty at Brown but two years, when respiratory diseases acquired in chemical experimentation developed and he died two years later. He received three honorary degrees from Brown, A.B. in 1803, A.M. in 1811 and M.D. in 1813.

Twenty-five years later another professor of chemistry in a New England medical college died from similar but more tragic misadventure. Dr. David Palmer, professor of chemistry at Berkshire Medical Institution, while demonstrating to his class an experiment using sulphuric acid on October 12, 1840, accidentally swallowed some of the acid and as a result died ten days later.

No successor to Dr. Bowen was appointed until 1817, when John DeWolf (1786-1862) became professor of chemistry. He also taught pharmacy. A student at Brown from 1802-05, he did not graduate, but received from that institution the honorary degree of A.M. in 1813. In 1837 he received the honorary degree of Doc-

*This uncertainty arises from the question as to whether the medical teaching in 1780 and 1781 at the College of William and Mary is to be given the dignity of a medical school. It graduated no students in course, but did give one honorary degree of doctor of medicine.

†The medical schools preceding that at Hanover were those of the College of Philadelphia, of King's College, of the College of William and Mary, of Harvard College and of Queen's College.

tor of Medicine from Castleton Medical College, where he was professor of chemistry and natural history. He also held professorships in medical schools at Woodstock, Vermont, and St. Louis, Missouri. Dr. DeWolf was a brilliant teacher.

It will be noted that this medical school started without a professor in medicine. It so continued for four years. In 1815, Dr. Levi Wheaton (1761-1851) was appointed professor of the theory and practice of physic. He also taught obstetrics.

A native of Providence, he entered Rhode Island College, but soon withdrew to enter the army. In the Revolutionary War he was attached to military hospitals. He returned to his college and received his A.B. degree in 1782.

After studying medicine with a preceptor he began practice in Hudson, New York. Before 1800, Dr. Wheaton returned to Providence to practice medicine. He was an active trustee of Brown University up to the age of ninety, for a period of fifty-three years from 1798-1851. In 1812 that institution conferred upon him the honorary degree of Doctor of Medicine. Dr. Wheaton was a successful practitioner, an eminent teacher, and a scholarly man. He contributed articles to the *Boston Medical and Surgical Journal* over the signature of "Senex."

Probably the best known of the members of the medical faculty at Brown was Dr. Usher Parsons (1788-1868), who was appointed adjunct professor of anatomy and surgery in 1822 and to the full title in 1823. He also taught physiology. A native of Alfred, Maine, he studied medicine in Boston under Dr. John Warren and was licensed in 1812. He served as surgeon in the War of 1812 and was with Perry's fleet on Lake Erie. After the war he served as surgeon in the navy, in the Mediterranean. In 1818 he received the degree of M.D. at Harvard. He also received an honorary A.B. and A.M. from Harvard and honorary degrees of M.D. from Dartmouth, Brown, and Berkshire.

During his periods of leave from his navy service he studied medicine in Italy, France, and England. In 1820 he returned to the United States and became professor of anatomy and surgery at Dartmouth for two years. In 1822 he located in Providence, where he was popular both in practice and as a teacher. He wrote extensively on medical and other subjects, and was prominent in medical society work, serving as Vice-President of the American Medical Association in 1853. He was one of the founders of the Rhode Island Hospital.

The medical course at Brown was the usual one of a fourteen-week term of lectures each year. The student was required to study three years under a preceptor, attend two lecture courses and pass an examination for his degree.

The instruction began in the autumn of 1811, but no student completed the course until 1814, when the first class of two men was graduated. There were no graduates in 1815. Fourteen classes were graduated, the last in 1828. No complete record of attendance is found in the records now available at Brown University since the names of the medical students were not printed in the university catalogue except in two years. In the mid-twenties there were about forty students in attendance. The largest graduating class, that of 1825, had thirteen members. The total number of degrees in course was eighty-six. Of these, twenty-three were graduates in arts from New England colleges. From 1812 to 1827 twenty-six honorary and six *ad eundem* degrees of Doctor of Medicine were granted. Of the graduates in course three merit especial mention because of their contributions to medical education, journalism, and literature.

Jerome Van Crowinshield Smith (1800-1879) was born in Conway, New Hampshire, and graduated at Brown in medicine in 1818. He received the *ad eundem* degree of Doctor of Medicine from Berkshire Medical Institution in 1825, where he was professor of anatomy and physiology. He held a similar professorship at the New York Medical College. The greater part of his professional life was spent in Boston. Here he was port physician from 1826-1849, and from 1828-1856 was editor of the *Boston Medical and Surgical Journal*, which, under his editorship, became a leader in medical journalism. In 1854-5 he was mayor of Boston. He wrote extensively in several fields. In 1832 he wrote "The Life of Andrew Jackson." and in 1869 a prize essay on "The Physical Indications of Longevity."

Alden March (1795-1869), born in Sutton, Massachusetts, graduated in the class of 1820. His taste was toward anatomy and surgery. He settled to practice in Albany, New York. He was a professor in Castleton Medical College from 1825-31. In 1827 he founded the Albany Medical Seminary, which was enlarged into the Albany Medical College in 1839. In this school he was professor of surgery and its leader for thirty years. He founded the Albany City Hospital. He was one of the founders of the American Medical Association and its president in 1857. In surgical practice, in medical education, and in medical organization he was a leader for many years. In 1868 Williams College gave him the honorary degree of LL.D.

Elisha Bartlett (1804-1855) was born in Rhode Island and graduated in the class of 1826. The next year he spent in medical study in Paris. He located in Lowell, Massachusetts, was the first mayor of that city in 1836, and in 1840 was a member of the Massachusetts General Court. He began his teaching career at the Berkshire Medical Institution in 1832, as professor of pathological anatomy, a rare title at that time. Here he received an *ad eundem* degree of

Doctor of Medicine in 1833. Next he taught this subject and also materia medica at the Vermont Medical College at Woodstock, Vermont, and then was professor of theory and practice of medicine and pathological anatomy at Dartmouth from 1838-40, succeeding Dr. John Delamater and being a colleague there of Dr. Oliver Wendell Holmes. Later he was professor of theory and practice of medicine at Transylvania University (Lexington, Kentucky) (1841-44 and 1846-49), and at the University of Maryland (1844-46). He was on the faculty of the Louisville Medical College for one year (1850) and then became professor of materia medica and medical jurisprudence in the College of Physicians and Surgeons of New York from 1850-52, when he resigned because of failing health.

But his fame did not rest alone on holding professorships in seven different medical schools in a period of twenty years, although he was reputed to be one of the best medical teachers of his generation. His medical writings were of high order. In 1841 he published "History, Diagnosis, and Treatment of the Fevers of the United States," which ran through three editions. His "Essay on the Philosophy of Medical Science" (1844) and "Inquiry into the Certainty of Medicine" (1848) were designated by reliable contemporary critics as the best productions in American medical literature up to that time. Dr. Bartlett at Lowell edited the *Monthly Journal of Medical Literature*. His writings were not confined to medical subjects for he also wrote many graceful poems.

Many medical schools of the United States have terminated their careers. Of more than two hundred, less than eighty now remain. The causes of these terminations usually are found in faculty dissensions, diminishing attendance because of excessive competition, and mergers. Occasionally, in the early days, the prejudice of the laity against human dissection and the methods of securing anatomical material was a primary cause for closing a medical school.

However, in the demise of the medical school of Brown University appears a cause that is entirely unique in the history of American medical education. In December 1826, the occupancy of the presidency of Brown University changed. The new president was Rev. Francis Wayland, Jr., of Boston, a graduate of Union College in 1813. He was, in 1826, thirty-one years of age. He had very firm convictions of the importance of college discipline, and in his view it could be accomplished only by intimate contact of the teachers and students, not only in the classroom but throughout the day.

In conformity with these ideas, a month after President Wayland assumed office in February 1827, the corporation passed the following resolution:

> "Whereas, It is deemed essential to an efficient course of instruction, and to the administration of discipline in this University, that all its officers be actual residents within the walls of the Colleges; therefore,
> "Resolved, That no salary or other compensation be paid to any Professor, Tutor or other officer, who shall not during the course of each and every term occupy a room in one of the colleges (to be designated by the President), and assiduously devote himself to the preservation of order and the instruction of the students, or the performance of such other duty as may belong to his station."

The four professors of the medical faculty were at the time, respectively, seventy-four, sixty-six, forty-one, and thirty-nine years of age. All had families and all were in medical practice. To expect these men to leave their families and practice, and take rooms in the college dormitories was inconsistent with their established responsibilities. The same condition pertained to Tristam Burges, professor of oratory and belles-lettres, an attorney in Providence and at the time a member of the United States House of Representatives and aged fifty-seven.

In the catalogue of 1828 these five men are designated with a note "These gentlemen . . . are not of the immediate government and do not at present give any instruction in the University." The services of Professors Burges, Wheaton, and Parsons terminated in 1828. Dr. Drowne continued in his professorship until his death in 1834, but probably he was inactive since he was nearly eighty years of age. Dr. De Wolf, the youngest man of the group, continued in his professorship until he was succeeded in 1834 by Dr. George I. Chace.

Thus a medical school, which after various difficulties had reached successful operation with an attendance of about forty students in each year, was terminated abruptly by an executive order, not because of any hostile feeling on the part of President Wayland toward the medical school, but because he believed teachers should "devote themselves exclusively during term-time to the instruction and discipline of this institution". This may be considered the first attempt to install full-time medical teachers. Much public feeling and newspaper controversy resulted, but the career of the medical school was ended.

The present writer acknowledges a major indebtedness to the historical sketch written in March 1881 by Dr. Charles W. Parsons (1823-1893), A.B. 1840, M.D. 1845, Harvard, the son of Dr. Usher Parsons.

This pamphlet is now rare and it seems worth while to recall to the present-day profession the share of Brown University in the early medical educational history of New England.

# CARCINOMA OF THE JEJUNUM*

BY MARSHALL K. BARTLETT, M.D.†

BECAUSE of the rarity of the lesion, and its interesting clinical aspects, it seems desirable to continue to report individual cases of carcinoma of the jejunum as they occur.

In a recent article Harris and Rosenblum[1] have summarized this subject admirably and have thoroughly reviewed the literature. They find that carcinoma of the jejunum represents roughly one per cent of all intestinal carcinomata. The decade of greatest incidence is from 30 to 40 years of age. Men are affected about twice as often as women. Radical operation offers a 16 per cent chance of cure.

## REPORT OF CASE

Miss A. McG., a 45-year-old single American shoe worker, entered this hospital on July 26, 1931. For one year she had noted a gradual increase in the size of her abdomen. Her appetite and digestion were fair, although she had been troubled by gas after meals for many years. There had been no epigastric distress, pain, nausea or vomiting at any time. She had always been constipated, but there was no history of recent change in bowel habits. No gross abnormality of the stools had been noted.

The family history was not remarkable. Past history was irrelevant except for excision of glands of the neck twenty years previously and an appendectomy seven years ago. She had skipped two periods six months previously. Otherwise her catamenial history was not remarkable. The flow was decreasing slightly in amount.

The patient was a fairly well-developed, but rather poorly nourished, nervous woman. General physical examination failed to reveal any notable abnormality. On pelvic examination a smooth, firm, non-tender mass was found, rising to the umbilicus. This was interpreted as a fibroid uterus. The Wassermann reaction was negative.

At operation a symmetric fibroid uterus was found, rising six inches above the symphysis. There was a follicle retention cyst of the left ovary two inches in diameter. The omentum was adherent in the region of the old appendix scar. There were a few adhesions around the gall bladder. The stomach, kidneys and spleen were normal to palpation.

Supravaginal hysterectomy was performed. The patient made an uneventful recovery and was discharged fourteen days after operation.

The pathologic report was endometrial dysplasia, fibromyoma, normal uterine wall, normal tubes, normal ovaries.

*Interval History.* For one week after going home the patient had frequent small bowel movements. An occasional tarry stool was noted. No bright blood was seen. She was given castor oil and a soft solid diet.

Three days later she began to vomit, about once a day on the average. Vomiting was preceded for several hours by mild cramplike epigastric pain, and the vomitus consisted of bile-stained undigested food. There was little or no nausea, and vomiting gave relief of the pain. There had been no jaundice, clay-colored stools or dark-colored urine.

Postoperative intestinal obstruction was suspected and a gastro-intestinal series was advised. The esophagus was normal. The stomach was normal in size, shape and outline, with vigorous and irregular peristalsis. There was an 80 per cent gastric residue. The ileum was markedly dilated, due to almost complete obstruction. Barium enema revealed a normal colon.

Exploratory celiotomy was decided upon and under novocaine anesthesia, later supplemented by nitrous oxide and oxygen, the abdomen was opened through the old mid-line scar. The pelvis contained a few peritoneal adhesions, which were easily freed. Further exploration revealed an annular constricting carcinoma about twelve inches distal to the duodenojejunal juncture. There were no palpable metastases in the liver. The mesentery of the small intestine was studded throughout its extent with soft pea-sized lymph nodes.

ADENOCARCINOMA OF THE JEJUNUM

The dilatation of the proximal loop is well shown, in spite of shrinkage due to fixation.

Resection of the growth, with about sixteen inches of jejunum and the subtended mesentery, was performed. The proximal loop of bowel was dilated to about four times its normal diameter. Side to side anastomosis was thought preferable and was done. At the end of the operation the patient's pulse was rather weak and rapid, and a transfusion of 500 c.c. of citrated blood was given.

Pathologic report was adenocarcinoma of the jejunum with normal lymph glands.

Except for occasional vomiting for the first few days after operation, convalescence was uneventful and the patient was discharged on the twenty-third day.

When last seen, three months after operation, she was in good health. There were no gastro-intestinal symptoms. She had gained eight and one-half pounds. Pelvic examination was negative. Deep x-ray therapy was advised.

## REFERENCE

1 Harris, Franklin I., and Rosenblum, Harold: Primary carcinoma of the jejunum. Report of a case. Arch. Surg. 23:805 (Nov.) 1931.

*Report of a Case from the Free Hospital for Women, Brookline, Mass.

†Bartlett—Assistant in Surgery, Massachusetts General Hospital. For record and address of author see "This Week's Issue," page 40.

# CASE RECORDS
## *of the*
# MASSACHUSETTS GENERAL HOSPITAL

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN WEEKLY CLINICAL-PATHOLOGIC EXERCISES

EDITED BY RICHARD C. CABOT, M.D.
F. M. PAINTER, A.B., ASSISTANT EDITOR

## CASE 18271

## GANGRENE OF A FINGER AND DISCOLORATION OF A TOE

### SURGICAL DEPARTMENT

#### PRESENTATION OF CASE

DR. LOGAN H. ROOTS*: This is the case of a twenty-eight year old white weaver who was referred to the hospital with a diagnosis of circulatory disease. The chief complaint was stiffness and soreness of his right little finger of about two months' duration. His doctor sent him here to Dr. Allen.

Going back to apparent causes, the present illness began eight months before entry, when he began to be short-winded. There was a little palpitation. He did not complain of orthopnea. His doctor advised him to give up his work and gave him some digitalis without making any general diagnosis. The patient stayed away from work until three weeks before entry. Two months before he came in his right little finger began to get a little sore and stiff. Two or three weeks later it was quite tender to touch, without being discolored. One week before he came in it was swollen, became a little discolored and finally discharged a little pus. Three days before he came in his doctor incised it without getting any pus. A week before he came in his left middle toe became blue and tender. He never had had anything like that before. His hands and feet had not been particularly cold. The day before he came in he developed a little cough and did not seem to be quite right, so he was sent into the hospital.

When I saw him that night he did not seem to be acutely sick, but it was very evident that he was a rather worn-out man. He had a peculiar pallor which was very close to a *café au lait* tint. There was no suggestion of petechiae on the mucous membranes, but on the body there were two or three suspicious looking petechiae, possibly old. He was slightly dyspneic even when sitting up, markedly so on lying down. His heart was one centimeter beyond the midclavicular line, with bounding impulse and a faint suggestion of a thrill. There was a rumbling presystolic murmur at the apex. There was no early diastolic murmur. There was nothing over the aortic area except a prolonged clapping second sound. In his chest there were a great many very fine crepitant râles throughout the back and particularly above the heart in front. The abdomen was negative. None of us felt the spleen, but on turning him on his side the percussion dullness seemed to come pretty close to the costal border.

Only one blood culture was done, the day he entered. The sputum showed a great many organisms, no tubercle bacilli. The white blood cell count was 25,000 to 10,000, with 88 per cent polynuclears.

When he came in he was not very sick. The next day he gradually developed more cough, not productive of very much sputum, and his temperature, pulse and respirations all went up. The hand was treated with boric soaks and boric ointment. The left middle toe was slightly discolored. During the next few days in the hospital he did not become very much worse again so far as external signs went. During the fifth day however he gradually became unconscious. The signs did not change. The next morning he very quietly died.

*Junior interne on the West Surgical service.

#### CLINICAL DISCUSSION

DR. ARTHUR W. ALLEN: It is interesting that this man could have been sent in with a diagnosis of Raynaud's disease and be as ill as he was when he arrived. I believe that the emboli which occur in malignant endocarditis are apt not to be peripheral. I am not sure about that; but I have seen emboli in the lung and brain in an occasional case of bacterial endocarditis and I do not recall having seen peripheral embolism before. The type of heart disease which gives peripheral emboli usually throws off an embolus large enough to occlude a main vessel in either the leg or the arm at a high enough level to produce gangrene of the extremity, an embolus coming to rest in the popliteal or in the femoral artery, or in the upper extremity either in the brachial or in the axillary vessels.

The gangrene in this man's fifth finger might possibly be explained on a chemical basis. He might have had some mild interference with the circulation of the digit, and it was brought out in his history that he had had some cresol dressings. There have been cases of gangrene of the finger reported following lysol and cresol applications. It is difficult to see how the circulation of the finger could be occluded by an embolic process alone. There are four vessels that go out pretty well towards the ends of the fingers, and in order to get gangrene of the digit one would have to assume that the emboli were multiple and distributed among more than one of these vessels. It is easy to explain the discoloration of the middle toe because he might have had an embolus come to rest in the dorsalis pedis artery which might have given him that distribution. The chemical

factor so far as the finger is concerned seems to me to be a possible explanation of gangrene there.

Dr. Bock saw the patient, and here I think he could add something to the history.

DR. ARLIE V. BOCK: When I saw him he had a very high fever and was very sick, sweating profusely and breathing very rapidly, with a pulse rate of 130. He showed then very little that was definite in the heart—a systolic thrill, a systolic murmur at the apex, some enlargement. The blood pressure was normal. There was no evidence of petechiae, new or old, anywhere that I could see. There was the evidence of embolism in the finger and toe. The lungs were the most interesting part of the picture, having fine moist râles throughout the chest. The only conditions in which I have found such signs on physical examination were terminal miliary tuberculosis or miliary streptococcus abscesses in the lung. That is what I thought he had.

Two days later after a good deal of morphine the pulse rate slowed down and I could then hear systolic and diastolic murmurs of mitral origin. There seemed to be no doubt, taking the whole case into account, that he had subacute bacterial endocarditis of the mitral valve and that this lung process was a terminal complication. I felt especially interested in the sputum report, for I thought that he might have miliary abscesses in the lungs or a widespread pneumonia in both lungs.

CLINICAL DIAGNOSES (FROM HOSPITAL RECORD)

Subacute bacterial endocarditis.
Bronchopneumonia with focal abscesses of the lung.

ANATOMIC DIAGNOSES

Subacute bacterial endocarditis?
Mitral stenosis, moderate.
Hypertrophy and dilatation of the heart.
Coronary sclerosis.
Old fibrous pericarditis, small area.
Malignant vascular nephritis.
Pulmonary congestion and atelectasis.
Acute bronchitis.
Multiple pulmonary infarcts, small.
Chronic fibrous pleuritis, bilateral.
Chronic passive congestion of the spleen.
Multiple old infarcts of the spleen.
Gangrene of the terminal phalanx of the right fifth finger.
Purplish discoloration of the left middle toe.
Multiple petechiae in the jejunum.
Old thoracotomy scar, left.

PATHOLOGIC DISCUSSION

DR. TRACY B. MALLORY: This makes the third case* of bacterial endocarditis the original symptoms of which brought the patient first into a surgeon's hands rather than into those of a medical man. It is also unusually interesting from a strictly cardiac point of view in that definite mitral stenosis is unusual in these cases. The mitral valve before opening would barely admit the tip of the thumb, a condition of moderate though not extreme stenosis. It is however the most marked mitral stenosis I have seen associated with subacute bacterial endocarditis. Absolute proof of that diagnosis we have not got, because the blood cultures in life and at autopsy were negative. On the other hand the type and size of the acute vegetations on the heart valves are so characteristic that I do not know anything else that could cause the disease.

*One of the others is Case 18231, published June 9, 1932.

The lesions in the lungs appeared to be largely multiple small infarcts and foci of atelectasis and edema. There was no very definite pneumonia. I presume that the infarcts must have been secondary to emboli originating in thrombi in the peripheral veins, possibly in the region of that middle toe. Arterial occlusion, gangrene and then venous thrombosis is a logical sequence. Unfortunately we were not able to investigate that thoroughly. I think that the case is distinctly unusual in that all the embolic manifestations were of a gross nature.

The kidneys were of particular interest in that they showed definite infarcts but no nephritis. It is extremely rare that a case of bacterial endocarditis does not show definite glomerular nephritis. There were lesions in the kidney here, but they were entirely in the small arteries. He shows the typical lesions of malignant vascular nephritis in an early stage but no nephritis of the glomerular type. I have never before seen malignant vascular nephritis in association with bacterial endocarditis. I am quite unable to tie it up with that.

A PHYSICIAN: How large was the spleen?

DR. MALLORY: It weighed 400 grams. I should think it might have been palpable.

A PHYSICIAN: During the latter part of the illness did the patient have pain in the chest such as we get commonly from pleurisy?

DR. ROOTS: He did not complain of pain. The cough was dry.

DR. MALLORY: The infarcts of the lungs were very small miliary ones.

DR. ROOTS: He did not give any history of rheumatic fever. In the urine there were occasional red and white blood cells.

DR. MALLORY: I think the urinary findings are worth emphasizing, because almost no case of bacterial endocarditis runs a course without renal involvement. The vast majority of the cases have a definite nephritis before they are through, though not one that leads to renal insufficiency. Practically all the remainder can be counted upon to develop renal infarcts. So repeated examinations of the urine showing the appearance, disappearance and reappearance of red cells would be quite suggestive evidence in

favor of bacterial endocarditis if we could not explain it in any other way.

As regards the question of gangrene of the extremities in bacterial endocarditis, I believe Dr. Allen's point in regard to the differences in circulatory supply of the fingers and toes is important. Emboli large enough to occlude the arteries of the digits are certainly thrown off in a fair percentage of cases. I am sure that I have seen gangrene of a toe more than once, but I do not remember having seen gangrene of a finger. The abundant collateral circulation in the fingers would explain this adequately.

## CASE 18272

## PAINFUL SWELLING ABOUT THE UPPER END OF THE LEFT TIBIA

### Orthopedic Department

#### PRESENTATION OF CASE

Dr. Henry B. Crawford*: *First admission.* This is the case of a thirty-nine year old policeman who was first seen in this hospital following an automobile accident three years and a half before his final entry. He had a laceration of the right knee and a bump of the upper end of the tibia which did not bother him a great deal. He came in complaining of pain in the right knee and a feeling as though there were something in his knee which snapped in and out of place.

Examination showed tenderness over the external joint line and some effusion into the joint.

A diagnosis was made of injury to the external semilunar cartilage. The external semilunar cartilage was excised and found to be frayed.

*History of interval.* After discharge he had increase of the effusion in the joint and some pain, now mostly on the internal aspect of the joint.

*Second admission,* a month after his previous discharge. We felt that before he could have a usable leg the internal semilunar cartilage would have to be removed. That was removed. The cartilage itself was found to be normal, but it was thought by the surgeon to be a little more mobile than usual. After excision of that cartilage the man was able to go back to duty.

*History of interval.* When he was seen a year and three months later he had excellent motion of his joint and none of the old symptoms in his right knee.

*Third admission.* He was not seen again until two years later, when he entered complaining of some "hot" pain and swelling of the upper end of the left tibia of eight months' duration. This had been gradually increasing.

Examination showed very definite swelling around the tibial tubercle with tenderness over both the medial and lateral aspects of the lower leg and swelling extending down four or five inches below the lower end of the patella.

X-rays showed some mottling of the lower end of the femur and the patella, but the only thing which showed in the tibia was a very faint lifting of the periosteum. It was loose, a little rough on the outside and there was very slight raising of the periosteum.

A diagnosis of periostitis and chronic osteomyelitis was made. The man had a normal temperature. The question of lues was considered, but he denied any infection, any chancre or any secondary manifestations. His wife had had two normal children, no miscarriages. A Wassermann which was taken when he came into the wards was not reported before operation. It was decided to go ahead and relieve the subperiosteal pressure which we felt was giving this man his symptoms.

So with a preoperative diagnosis of periostitis and chronic osteomyelitis of the tibia, an incision was made over this part of the tibia. Drill holes were put in and the wound was sewed up tight.

He made an uneventful convalescence and is now back at work. The wound is well healed and there are no further symptoms. The Wassermann was reported as positive. He has been followed in the Skin Clinic. A week after discharge a Wassermann was reported negative and a Hinton weakly positive. A month later these were both repeated and the Wassermann was negative and the Hinton questionable. The dermatologists say that they cannot make a diagnosis of lues on the man's history or the findings.

#### Clinical Discussion

Dr. Philip D. Wilson: The only thing that I would say in addition is that I think malignant disease was considered in the differential diagnosis. The x-ray findings were certainly not striking. The Wassermann test had not been reported to my recollection; at least I had not heard about it on the morning of operation, when it was decided to go ahead. We felt at the time that there was a distinct possibility of its being a luetic lesion, but we thought it was extremely improbable. The patient was unwilling to delay, the operation was insignificant and would reveal the diagnosis and probably relieve the pressure symptoms; so we thought that exploration was justifiable.

At operation the periosteum was found extensively thickened in the region lateral to the tubercle, with porky infiltration of the subcutaneous tissues. There were no other abnormal findings. Drill holes were made through the cortex to relieve pressure and provide vascular channels for repair. A specimen of bone and periosteum was removed for histologic study. The diagnosis was periostitis, probably luetic in

*Recently resident on the Orthopedic service.

character. The incision was closed without drainage. The knee joint was not opened.

The other thing that may be said about the operation is that we had a distinct feeling that even if the Wassermann proved to be positive there would still be a question as to whether this was in reality a syphilitic lesion or a neoplasm. Neoplasm may develop in a patient with syphilis. Biopsy offered the only sure method of differentiation.

DR. TRACY B. MALLORY: What was the feeling about the possibility of this being tuberculous?

DR. WILSON: I do not think we seriously considered that. I think we could rule that out on the negative x-ray findings and the absence of clinical signs.

DR. MALLORY: It is rather an unusual location for a tuberculous lesion.

DR. GEORGE W. HOLMES: May I ask what the x-ray report was on this?

DR. CRAWFORD: "The joint spaces are of normal width. No evidence of soft tissue swelling. Lower end of the left femur shows some mottling in its anterior portion. There is also some mottling in the patella. No periosteal reaction. No positive evidence of bone destruction. The appearance could all be due to atrophy. Osteomyelitis cannot be excluded."

DR. HOLMES: Of course the x-ray is notoriously unreliable in early cases of osteomyelitis. Such an x-ray appearance as is seen here is rather common where the interosseous septum joins the bone. I personally should not interpret that as being a true osteomyelitis.

DR. WILSON: How do you explain that appearance of mottling?

DR. HOLMES: What we have here is an increase in the density. These are heavy bones, with a heavy cortex. I think before we can say the x-ray shows evidence of osteomyelitis we should have evidence of bone destruction.

DR. CHANNING C. SIMMONS: Isn't the fact that all three bones around the joint show slight change very suggestive of syphilis?

DR. HOLMES: That is new to me. I did not know that it is suggestive.

DR. SIMMONS: I have that impression.

DR. HOLMES: Of course that slight mottled appearance could be interpreted as atrophy. He had an operation on his leg before and had not used it much. That would cause some mottling.

DR. SIMMONS: Didn't you get mottling in the patella, the tibia and the femur?

DR. HOLMES: Not clear-cut. The appearance might be due to atrophy alone; it may not be anything. Of course as far as showing the semilunar cartilages is concerned, x-ray does not help the orthopedist at all. The only time the x-ray is of value is when the cartilages have been dislocated for some time and have become calcified.

DR. WILSON: I should not consider acute osteomyelitis in the diagnosis. There was no evidence of acute inflammation. He was not running a temperature and was not ill.

DR. HOLMES: I think subacute osteomyelitis would have shown by x-ray.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Chronic periostitis, luetic.

## PATHOLOGIC DISCUSSION

DR. MALLORY: I have a section of the biopsy specimen removed at operation. There is considerable new bone formation, no destruction of the bone whatever, and then there are a number of localized lesions in between the newly formed trabeculae. These consist of rings of large mononuclears around the blood vessels and also of several definite little foci with giant cells in them. They could perfectly well be miliary tubercles or could equally well be miliary gummata. The fact that there was no necrosis in the bone seemed to me strongly in favor of syphilis and against tuberculosis, which causes early necrosis. We made a tentative diagnosis of luetic periostitis before we heard the result of the Wassermann. The possibility of settling the question histologically would be very slight, because a spirochete stain would be quite impossible following the decalcification and embedding.

DR. HOLMES: Do you think those gummata could produce that slight mottled appearance in the x-ray, or are they much smaller than that?

DR. MALLORY: They are extremely small, probably not more than a quarter of a millimeter in diameter. I think it is the irregular proliferation of cortical bone that gives such changes as you see.

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## FALLACY OF CONSIDERING ALCOHOL AN EFFICIENT STERILIZING MEDIUM

THE established, but little known or appreciated, fact that alcohol is a poor disinfectant was recently clearly demonstrated when *all* cultures from freshly prepared bottles of "sterilizing solution" picked at random from the wards of one of the large hospitals in Boston yielded growth of spore-bearing bacilli, many of which proved to be Welch bacilli!

Although relatively efficient, in proper concentration, against the vegetative forms of bacteria, alcohol in any strength has little or no effect against bacterial spores. Koch[1], in 1881, reported that alcohol or alcohol dilutions failed to kill anthrax spores after immersion for 110 days. Somewhat later Minervini[2] and Russ[3] found that silk threads impregnated with spores of *B. anthracis* or *B. subtilis* produced vegetative forms on subculturing even after 50 days in 25 to 99 per cent alcohol. Heim[4] was able to cultivate virulent anthrax bacilli from impregnated threads which had been immersed in alcohol for 20 years. Nye and Mallory[5] demonstrated that 70 per cent alcohol for 1 hour failed to sterilize iron wires contaminated with cultures of Welch bacilli. Quite recently, Kuhn and Dombrowsky[6] have reported that over half of 40 samples of alcohol (70 to 96 per cent) from the clinics and hospitals at Giessen, Germany, were found to yield spore-forming bacteria on culture. Knorr[7] has had similar experiences.

It is thus apparent that one cannot and should not rely upon alcohol as a means of sterilization, particularly for instruments or other paraphernalia used in methods of treatment that might permit the introduction of spore-bearing bacilli deep within the body. Furthermore, great care should be exercised in the preparation of "sterilizing solution" in order to ensure its primary sterility. Knorr[7] recommends redistillation of the alcohol under sterile precautions and dilution with sterile distilled water. Such a procedure demands equipment only within the means of the larger clinics and hospitals. The use of sterile bottles and freshly distilled water would certainly be a distinct advance over the slipshod and haphazard methods generally in vogue at present. That so few infections attributable to non-sterile alcohol or to the failure of alcohol to sterilize contaminated instruments have been reported is merely another example of the abuse the human body can endure.

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## THE ARSPHENAMINES AND NEUROSYPHILIS

FOR many years there has been a belief among physicians that the use of the arsenical preparations during the primary stages of syphilis may lead to an increased incidence of neurosyphilis later in life. It is felt by some that treatment, especially if it was inadequately given, would almost certainly force the spirochetes, or their toxins, deeper into the tissues, where they might rest unharmed for many years, later to reappear in the form of an infection of the nervous system. That the organisms or toxins of the disease, or both, linger for many years in the nervous system is beyond dispute, but that they are forced into this situation as the result of treat-

ment in the primary stages of the disease is quite another matter.

Recently, at the Mayo Clinic, five hundred case records of patients showing undoubted neurosyphilis have been carefully studied*. They were divided into groups: first, those receiving no previous treatment; secondly, those in which treatment in the acute phases had consisted of mercury and iodides only; thirdly, those in which arsphenamine and mercury had been given at the time of the acute infection, but not in sufficient amounts; and fourthly, those in which adequate treatment had been given at the start of the disease. Seventy-two per cent of the entire series had had no treatment for syphilis before they came to the Mayo Clinic; in fact, more than half of these could not give a history of acute syphilitic infection and it must be assumed that they were, previous to recognition of the neurosyphilis, unaware of the presence of the disease. Thirteen per cent had been treated only by iodides and mercury, forming Group 2. Twelve per cent had been inadequately treated, and only three per cent had received what was considered as sound, thorough treatment in the primary or secondary stages of the disease.

In analyzing the results, there is no evidence to warrant the presumption that arsphenamine predisposes to, or induces, the development of neurosyphilis. Even small amounts of arsphenamine are better than none as a protection of the nervous system of patients with acute syphilis, whereas early treatment in adequate amounts increases still further the percentage of patients whose nervous system is not affected.

*O'Leary, P. A and Rogin, J. R. The arsphenamines as factors in the production of neurosyphilis. Proc. Staff Meetings Mayo Clinic 7:273, May 11, 1932.

## THIS WEEK'S ISSUE

CONTAINS articles by the following named authors:

COONSE, G. KENNETH. A.B., M.D. Harvard University Medical School 1924. Former member of Fracture Service, Massachusetts General Hospital. Associate Orthopaedic Surgeon, Newton Hospital. Professor of Orthopaedic Surgery, University of Missouri. Chief Surgeon, State Crippled Children's Service, University of Missouri, Columbia, Mo. Consulting Orthopaedic Surgeon, Boone County Hospital, Columbia, Mo. Address: University Hospitals, Columbia, Missouri. Associated with him are

AUFRANC, OTTO ELMO. A.B., B.S. Student Assistant in Orthopaedics, University of Missouri. Address: University Hospitals, Columbia, Missouri. And

COOPER, MAURICE. S.B., M.D. Rush Medical College 1929. Resident Physician, Student Health Service, University of Missouri, Columbia, Missouri. Instructor in Medicine, 1931-1932. Address: University Hospitals, Columbia, Missouri. Their subject is "Importance of Intrapleural Pressures and Their Measurements in Various Pathological Conditions." Page 1.

TILLOTSON, KENNETH J. M.D. University of Vermont College of Medicine 1921. Psychiatrist-in-Chief, McLean Hospital and Massachusetts General Hospital. Instructor in Psychiatry, Harvard Medical School. His subject is "Some Newer Trends in Psychiatry." Page 8. Address: McLean Hospital, Waverley, Mass.

WAITE, FREDERICK C. B.Litt., A.M., Ph.D. Assistant in Anatomy, Rush Medical College 1900-1901. Assistant Professor of Histology and Embryology, Western Reserve University 1901-1904. Associate Professor, Western Reserve University 1904-1906. Professor of Histology and Embryology, Western Reserve University 1906-. His subject is "The Third Medical College in New England, That of Brown University (1811-1828)." Page 30. Address: Western Reserve University, Cleveland, Ohio.

BARTLETT, MARSHALL K. A.B., M.D. Harvard University Medical School 1928. Assistant in Surgery, Massachusetts General Hospital. His subject is "Carcinoma of the Jejunum." Page 34. Address: 264 Beacon Street, Boston.

## MISCELLANY

### NOISE IN BOSTON

During the winter a commission appointed by his Honor, the Mayor, has been studying the problem of the continuous increase in city noise and its evil effects. Their report will show that there is definite evidence that noise is detrimental to health, decreases efficiency of workers, increases mistakes in work and is an important factor in lowering real estate values in the city of Boston. These effects make it imperative that steps be taken to decrease noise as far as is possible. Much of the noise is due to carelessness and using of machines and vehicles not kept in proper condition. There are existing laws, which if enforced, will materially reduce noise. Other sources of noise can be reduced by securing the coöperation of various organizations and associations, such as those of milk dealers, taxi owners, truck owners, etc. Public opinion is of prime importance in all of this. Citizens, in large measure, can secure what they want, provided they will persist in the effort to obtain it and repeatedly bring the matter before the proper officials. Since noise abatement is in large measure a move for better health conditions, it behooves doctors to take an active part toward bringing about a decrease in noise. What is true of Boston is true of other cities and communities throughout New England.

HENRY A. CHRISTIAN, M.D.,
*Chairman, Boston Noise Commission.*

## COMPARISON OF DISEASE INCIDENCE IN CONNECTICUT WITH 1931 AND SEVEN YEAR AVERAGE

MONTH ENDING JUNE 25, 1932

| Diseases | 1932 Week ending June 4 | 1932 Week ending June 11 | 1932 Week ending June 18 | 1932 Week ending June 25 | Average cases reported for week corresponding to June 25 for past seven years | 1931 Week ending June 6 | 1931 Week ending June 13 | 1931 Week ending June 20 | 1931 Week ending June 27 |
|---|---|---|---|---|---|---|---|---|---|
| Cerebrospinal Men. | — | — | 2 | — | — | 1 | — | — | 1 |
| Chicken Pox | 120 | 170 | 80 | 66 | 66 | 121 | 96 | 72 | 69 |
| Conjunctivitis Inf. | 1 | 8 | 2 | — | 1 | 6 | 3 | — | — |
| Diphtheria | 3 | 4 | — | 4 | 20 | 6 | 1 | 1 | 4 |
| Dysentery Amebic | — | 1 | — | — | — | — | — | — | — |
| Dysentery Bacillary | — | — | — | — | — | 1 | — | — | — |
| Encephalitis Epid. | — | — | — | — | 1 | — | 1 | — | — |
| German Measles | — | 1 | 1 | 1 | 21 | 9 | 6 | 6 | 3 |
| Influenza | 2 | 1 | — | — | 1 | 1 | 2 | — | 1 |
| Malaria | 1 | — | — | — | — | — | — | — | — |
| Measles | 221 | 255 | 193 | 198 | 186 | 391 | 241 | 207 | 205 |
| Mumps | 71 | 69 | 57 | 29 | 22 | 52 | 67 | 46 | 24 |
| Paratyphoid Fever | 1 | — | — | 1 | — | — | 3 | — | 2 |
| Pneumonia (Broncho) | 21 | 22 | 17 | 8 | 17 | 12 | 11 | 10 | 10 |
| Pneumonia (Lobar) | 33 | 16 | 21 | 16 | 22 | 14 | 17 | 9 | 6 |
| Poliomyelitis | 2 | — | 3 | 3 | — | — | — | — | 2 |
| Scarlet Fever | 76 | 77 | 73 | 52 | 33 | 37 | 26 | 23 | 26 |
| Septic Sore Throat | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 1 |
| Tetanus | — | — | — | — | — | — | — | — | 1 |
| Trichinosis | — | 1 | — | 1 | — | — | — | — | — |
| Tuberculosis (Pul.) | 27 | 43 | 35 | 40 | 38 | 29 | 16 | 23 | 25 |
| Tuberculosis (O. F.) | 2 | 6 | 3 | 3 | 4 | — | 1 | 3 | 1 |
| Typhoid Fever | 1 | — | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Typhus Fever | — | — | — | — | — | — | — | — | 1 |
| Undulant Fever* | 2 | 3 | 1 | — | — | — | — | — | — |
| Whooping Cough | 90 | 83 | 98 | 60 | 58 | 73 | 37 | 40 | 60 |
| Gonorrhea | 32 | 28 | 26 | 59 | 27 | 25 | 22 | 16 | 23 |
| Syphilis | 31 | 48 | 30 | 79 | 33 | 38 | 26 | 28 | 38 |

*Made reportable August 14, 1928.

Remarks: No cases of Asiatic cholera, glanders, plague, or yellow fever during the past seven years.

## BRAIN ATROPHY ASSOCIATED WITH DEMENTIA PRAECOX

In a consideration of dementia praecox in Philadelphia May 31 at the meeting of the American Psychiatric Association, the opinion was expressed that the brain structure in cases of dementia praecox had undergone atrophy to a greater or less degree. Dr. N. W. Winkleman of New York City declared in this connection that the study of dementia praecox is a more important medical activity even than cancer because it attacks many young people. He believes that attention should be paid to the behavior of disease in its relation to the brain while patients are suffering from infectious disorders, so that organic damage will not result.

## RÉSUMÉ OF COMMUNICABLE DISEASES IN MASSACHUSETTS FOR MAY, 1932

Scarlet fever continues its high incidence begun in the late fall, the number of cases being again the highest ever reported for the month.

Measles, which has been slightly below normal, has suddenly begun to increase so that the number of cases reported during May is considerably above the average, though not so high as has been reported for this month in other years.

Mumps has also continued its high prevalence.

Diphtheria and typhoid fever are markedly below the usual number of cases reported for this month.

Pulmonary tuberculosis and lobar pneumonia, which showed an increase last month, have again dropped to below the average number.

Anterior poliomyelitis, epidemic cerebrospinal meningitis, German measles and influenza are all well below the usual prevalence for this month.

Chicken pox, tuberculosis, other than pulmonary and whooping cough were reported about the number of times expected.

The reporting of syphilis is about on the level for the last three years, but the reporting of gonorrhea for the month of May has dropped off considerably.

RARE DISEASES

*Anterior poliomyelitis* was reported from Adams, 1; Braintree, 1; total, 2.

*Encephalitis lethargica* was reported from Northampton, 1; out of state, 1; total, 2.

*Epidemic cerebrospinal meningitis* was reported from Arlington, 1; Boston, 2; Brookline, 1; Newton, 1; Springfield, 1; Wakefield, 1; total, 7.

*Malaria* was reported from Worcester, 1.

*Pellagra* was reported from Boston, 2; Millbury, 1; total, 3.

*Septic sore throat* was reported from Arlington, 1; Boston, 8; Cambridge, 1; Lowell, 1; Lynn, 1; Medford, 4; Somerville, 1; Watertown, 1; Winthrop, 1; total, 19.

*Tetanus* was reported from Boston, 1; Lynn, 1; Springfield, 1; total, 3.

*Trachoma* was reported from Chelmsford, 1; Waltham, 1; total, 2.

*Undulant fever* was reported from Attleboro, 1.

MONTHLY REPORT OF CERTAIN COMMUNICABLE DISEASES

| | Cases in Entire Pop. | | | | Case Rates per 100,000 Pop. | | |
|---|---|---|---|---|---|---|---|
| | May 1932 | May 1931 | Proso. Index* | Epi. Index† | May 1932 | May 1931 | Expected Rates‡ |
| All Causes | 12,358 | 9725 | — | — | 287.6 | 227.4 | — |
| Ant. polio. | 2 | 3 | 7 | .3 | .04 | .1 | .2 |
| Diphtheria | 135 | 148 | 303 | .4 | 3.1 | 3.5 | 7.1 |
| Ep. c. s. men. | 7 | 8 | 7 | 1.0 | .2 | .2 | .2 |
| Measles | 4468 | 2299 | 4352 | 1.0 | 104.0 | 53.8 | 101.3 |
| Pneu. lobar | 375 | 335 | 369 | 1.0 | 8.7 | 7.8 | 8.6 |
| Scarlet fever | 1971 | 1542 | 1041 | 1.9 | 45.9 | 36.1 | 24.3 |
| Tbc. pulmonary | 341 | 380 | 445 | .8 | 7.9 | 8.9 | 10.4 |
| Typhoid fever | 13 | 18 | 17 | .8 | .3 | .4 | .4 |
| Wh. cough | 815 | 625 | 1058 | .8 | 19.0 | 14.6 | 24.7 |
| Chicken pox | 938 | 1138 | — | — | 21.8 | 26.5 | — |
| German measles | 100 | 602 | — | — | 2.3 | 14.1 | — |
| Gonorrhea | 473 | 607 | — | — | 11.0 | 14.2 | — |
| Influenza | 14 | 23 | — | — | .3 | .5 | — |
| Mumps | 1387 | 644 | — | — | 32.3 | 15.1 | — |
| Syphilis | 365 | 361 | — | — | 8.5 | 8.4 | — |
| Tbc. other forms | 58 | 54 | — | — | 1.3 | 1.3 | — |

*This Index is an attempt to estimate the number of cases based on the trend during the past years which can be expected to occur, and is for the purpose of comparison with the number of cases which actually did occur.

†This ratio expresses how prevalent the disease is compared with the index mentioned above; 1.0 indicates that the actual number of cases equals the expected number. A larger number means a greater prevalence, and a smaller number a lesser prevalence than expected. Thus 2.0 would indicate twice the expected number, and .5 half the expected number of cases. The method used to determine the indices is described in the August 18, 1927 issue of the *Boston Medical and Surgical Journal*.

‡Calculated from the Prosodemic Index.

## ECONOMY AT EXPENSE OF HEALTH DEPARTMENTS

Throughout the country there appears to be a desire on the part of cities and towns to reduce the expenditures which have been found to be advisable in dealing with the functions of health departments. Among those who are at all familiar with the importance of efficiency in the administration of health problems, it has been made clear that any effort to counteract or impair the efficiency of public health administration will be followed by an unfortunate increase in certain diseases. The fear is expressed that the tendency to curtail the activities of health departments in behalf of alleged economy will probably increase, because to those who are unfamiliar with the importance of public health administration this seems to be one of the expenditures which can be reduced.

The argument that curtailment is necessary in the interest of economy is an obvious fallacy. The expense of preventable sickness and disability which would be threatened because of any diminution of activities of health departments would far exceed the cost of their prevention. It is to be hoped that the financial departments of states and cities will not be led into error in this respect.

## THE STUDY OF HEREDITY

The National Research Council scientific scholarships have been awarded for study during the sum-

mer and fall at the University of Missouri. Their work will be in conjunction with that of Dr. Louis J. Stadler, field crop expert at the University in the study of cell effects on heredity.

## NERVOUS BREAKDOWNS IN COLLEGE LIFE

Dr. Sidney K. Smith of Oakland, California reported to the American Psychiatric Association through Dr. Glenn Myers, a California colleague, that nervous breakdowns and sexual problems cause more students to need psychiatric advice than all other difficulties combined. This study is based on 1,000 student cases in the University of California and has revealed that more freshmen and sophomores ask for advice than juniors and seniors. Further it has been found that psychiatric treatment brings about the greatest degree of improvement in sexual maladjustments but that there are marked improvements in other types also.

## A COMMON INTEREST IN HOSPITALS

In an effort to reduce the loss which is estimated at $100,000 yearly, nine of the larger St. Louis hospitals have organized a credit organization. Other hospitals believed to lose an additional $50,000 through patients who fail to pay are eligible to membership and are expected to join. The Association, according to Rev. J. P. Jacobs, its president and credit manager of one of the hospitals, represents the first coöperative medium for the collection of hospital accounts in this country. Mr. Jacobs believes that the bad debt situation at present affecting hospitals is caused only in part by the depression and that it is due in some measure to the growing indisposition of people to meet the expense of hospital charges, even among those who might be able so to do. There is developing a class which is quite ready to impose upon the charitable features of hospital administration.

## CHARLES P. FISHER RETIRES

Mr. Charles Perry Fisher who has served for fifty years as Librarian of the College of Physicians of Philadelphia has retired.

## A RADIO MESSAGE PREPARED AND SPONSORED BY THE COMMITTEE ON PUBLIC EDUCATION OF THE MASSACHUSETTS MEDICAL SOCIETY FOR THE DEPARTMENT OF PUBLIC HEALTH

### Infantile Paralysis*

BY W. L. AYCOCK, M.D.

From the very nature of poliomyelitis (destruction of nerve cells which are necessary for the movement of muscles) it cannot be hoped that a cure will be found for paralysis after the nerve cells have been destroyed, although much can be done in the prevention of what has been called secondary crippling—contractures and deformities due to growth and development against muscles of unequal strength.

Hence, the aim has been to find some form of treatment which could be given early in the disease before the nerve cells have been destroyed in the hope that the one serious consequence of the disease—paralysis—could be prevented.

The one form of treatment that has both theoretical and experimental promise in this direction is immune serum. Essentially the grounds upon which this treatment is employed are that such a serum will render the disease virus inert in the test tube and under certain conditions will prevent the disease in animals inoculated with the virus so that from the point of view of the person who is ill with the disease and who may be crippled for life in a few hours, there has been no reason for withholding the possible benefits of serum.

But from the point of view of the scientist the effect of serum on the course of the disease has not yet been conclusively proved. One of the difficulties in the way of definitely determining the value of serum has been that it must be given in the early stage of the disease, during which none of the signs or symptoms give any indication as to whether or not paralysis will occur or how extensive it will be.

Another difficulty is the great variation in the outcome of cases, making it necessary to study large groups before statistical conclusions can be drawn.

Finally it has been only under exceptional circumstances where opinion has been divided as to the value of serum that comparable cases not treated have been available for comparison with the treated cases. It is only in this way that enough data can be obtained to settle finally the question as to whether serum has a curative effect on the disease. In the meantime we can be sure that even a vastly improved serum treatment, however desirable, would not give us what could be called a satisfactory solution to the poliomyelitis problem. The possibility or feasibility of any other method of control depends upon a knowledge of the epidemiology of the disease.

Sufficient evidence has been accumulated to lead to the conclusion that the virus of the disease spreads directly from person to person and that the majority of persons at least in cities are at some time exposed to it, and that only a very small proportion of those exposed to the virus develop the disease. There are reasons for believing that exposure to the virus is not harmful to most individuals, not so much because of any weakness in the virulence of the virus to which they are exposed but because most people are able to withstand exposure to the virus without suffering any harmful effects.

It, therefore, appears that the spread of the disease virus is dependent upon ordinary and perhaps to a great extent unavoidable human contact, and that the prospects of the bacteriologic control of

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the disease by attempts to curb the spread of its virus are doubtful. Of course, this does not mean that, as a matter of individual prophylaxis, measures should not be taken to prevent exposure to persons known or suspected as sources of infection (persons sick with the disease and those in close contact with them).

Similarly the prospects of the immunologic control of the disease are not encouraging. Even if a practical method of vaccination were available, there is, in the light of present knowledge, no way of separating the relatively small number of individuals who are destined to develop the disease from a relatively large number who will not develop the disease when they are exposed to the virus. Hence, an attempt to control the disease by artificial immunization would necessitate so much vaccination which would in reality be superfluous that its feasibility is open to serious question.

As already suggested there is evidence that an individual predisposition to the disease rather than exposure to the virus alone is the explanation why some individuals develop the disease when they are exposed to the virus while the majority do not show any signs of it, even though exposed to the same virus. A major problem for those engaged in the study of the disease is to determine the nature of this individual predisposition to it in the hope that its identification may make possible either the correction of the individual predisposition, or the selection of susceptible individuals for artificial immunization.

## EXPERIMENTS IN INDUCED MALARIA FOR THE TREATMENT OF GENERAL PARALYSIS

The United States Public Health Service, cooperating with the State Hospital at Columbia, South Carolina, has recently inaugurated a program of study pertaining to the treatment of general paralysis with induced malaria.

For the past several decades psychiatrists have known that cases of general paralysis which became infected with febrile disease frequently showed complete remissions for long periods of time. Professor Wagner-Jauregg of Vienna was one of the first of these observers, and in 1917 introduced the treatment of this form of insanity by artificially inoculating his patient with malaria blood. The results of this first attempt were so successful that the information rapidly spread to all of the countries of the civilized world, and his observations have been repeatedly confirmed.

It is probable that well over 10,000 cases have been reported in the medical literature to date, and a study of these reports shows that about twenty-five per cent of the patients so treated have a complete remission, may be returned to their homes, and, in almost all cases, resume their former occupation; these cases may be considered as practically cured. The excellent results of this treatment may be more easily discerned when one remembers that previous to its introduction permanent remissions occurred in general paralysis in only about one to two per cent of the cases, and the patients died within three to four years.

One of the chief difficulties in carrying out this treatment is the maintenance of an infected individual at all times who may be used as a donor in furnishing blood containing the malarial parasites. Such blood will keep after being taken from the body for a relatively short time, and the malarial parasites rapidly die. It is the prime purpose, therefore, in the work being carried on by the United States Public Health Service to arrive at a means of keeping the malarial parasites living over a long period of time under conditions that are usually found in transportation. Such an accomplishment would make this form of treatment available in any locality.

There are several sources of material for the artificial induction of malarial fever: Either the blood from a person infected with malaria or the form of the parasite from an infected mosquito may be used. When the mosquito bites, the parasites are injected and soon the victim becomes sick with malarial fever. Either infected human blood or the parasites obtained by dissecting out infected salivary glands may be used in producing malaria in cases of general paralysis. The malarial parasites have been successfully grown, but only over short periods of time. The growth of the parasites will be attempted in various forms of culture media, using not only the blood form but also the form as contained in the body of the mosquito.

Aside from the methods already described, malaria may be induced by a bite of the infected Anopheles mosquito held captive in small glass containers. It is difficult to raise mosquitoes under artificial conditions, and all used for this purpose must be captured in their natural habitat. Once in captivity the mosquito is permitted to feed upon a person infected with malaria fever, and after the usual period required for the development of the parasites in the salivary glands of the mosquito, this insect is allowed to bite the person with general paralysis. In a large number of these cases the general paralytic patient develops malarial fever after the usual period of incubation (approximately two weeks). Naturally, a complete study of the induction of malaria would include methods which might be used in the transportation of infected mosquitoes. A method has already been developed whereby infected mosquitoes can be shipped on long journeys without injury.

The entire subject of malarial treatment for general paralysis is new and numerous steps in the treatment may be improved and refined by close attention to details.

## HOW TO DIMINISH THE SURPLUS OF NURSES

Aid in stemming the increasing stream of nursing school graduates is asked of hospital trustees throughout the United States by organized nursing in an open letter recently posted. The letter bears

the signatures of the presidents of the American Nurses' Association, the National League of Nursing Education, the National Organization for Public Health Nursing and the chairman of the committee on distribution of nursing service of the A. N. A.

Five ways in which hospitals may balance the extra cost involved in employing larger numbers of graduate nurses are enumerated in the letter, following a brief picture of present overcrowding in the nursing profession. Further suggestions are sought from the hospital trustees.

"The broken morale of thousands of unemployed nurses has begun to react most unfavorably not on the number of young women applying but on the quality of applicants for enrollment in schools of nursing," says the letter. "This will inevitably increase when economic conditions improve unless the interested groups—hospitals, doctors and nurses—take effective action."

The best thought of all groups concerned will be needed to work out the adjustments in nursing service that the next few years will require, and certain steps can be taken now the letter points out.

The nurses' suggestions for the present are as follows:

1. Better selection of students, thus cutting down the cost of carrying large numbers of probationers for several months only to eliminate from 25 to 50 per cent of them.

2. Employment of ward helpers, maids, orderlies, attendants and secretaries to do a large amount of the routine work done by students.

3. Strengthening of hospital organization by the employment of graduate nurses who are available at relatively low salaries, thus giving the doctors nursing service uninterrupted by class attendance, and the patients the care of more experienced nurses.

4. Tuition fees for students in schools offering a sound and well-organized teaching program; also use of facilities of nearby educational institutions to save part of the cost.

5. Abolishment of allowances and use of funds for teaching the students.

"The nurses' problem is due not chiefly to the economic depression but to the weakness of a system of accepting students primarily as workers in the hospital instead of selecting them as potential graduates for service in their community in the various types of nursing," the letter concludes.

## CORRESPONDENCE

### REMINISCENCES OF THE NEUROLOGICAL DEPARTMENT OF THE MASSACHUSETTS GENERAL HOSPITAL

*Mr. Editor:*

In connection with Dr. Tillotson's paper, published in this number of the *Journal*,* a reminiscence may be in order, to accentuate the changed conditions.

*Some Newer Trends in Psychiatry. Page 8.

The collaboration he describes is largely carried out in the Neurological Department of the Massachusetts General Hospital. This department, which now has its neurologists and assistants, its neuropathologist, psychologist, resident physician and psychiatric staff, was limited, within my memory, to a single room, run, with the assistance of one student (I think I was the first, in 1879) by Dr. James J. Putnam, whose eminence in the profession would surely have entitled him to more sumptuous quarters had neurology as a specialty then received the respectful attention it deserved.

This so-called "Nervous Room" was a small three-cornered affair in which loomed large a somewhat complicated electrical apparatus designed for the use of two operators at once. With the intricacies of this instrument Dr. Putnam was so familiar that I always assumed he had a hand in its construction. He certainly did in its repair. On the table was a big ledger in which were inscribed the names and diseases of the patients together with such notes as it interested the head of the department to make in shorthand, illegible to the other members of the staff.

This room has long since disappeared to make way for other departments, some of them almost if not quite unknown at that time. Such, for example, was that for x-ray, which was, however, already at its inception, regarded as of sufficient importance to justify an exposition in the course of which the lecturer explained that, while an interesting phenomenon, it was doubtful if it would ever be of practical value!

Yours very truly,

GEORGE L. WALTON.

### OFFICIAL DECISIONS BY THE MASSACHUSETTS BOARD OF REGISTRATION IN MEDICINE

June 27, 1932.

The *New England Journal of Medicine*,

At a special meeting (June 23, 1932) of the Board of Registration in Medicine, the following votes were passed:

1. To restore the license of Dr. Louis A. Hermann, 93 Centre Street, Brookline, Massachusetts, which had been cancelled on account of violation of the Harrison Narcotic Law, on November 16, 1916.

2. To restore the license of Dr. Joseph N. Tessier, of 571 Dartmouth Street, New Bedford, Massachusetts, which had been revoked on December 16, 1926, on account of an abortion.

Very truly yours,

STEPHEN RUSHMORE, M.D., *Secretary.*

### THE AID ASSOCIATION OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY

June 16, 1932.

The Editor,
*New England Journal of Medicine*,

The card submitted with this letter tells of the Perpetual Memorial Fund that is being established in honor of the late Dr. John B. Deaver.

The Committee in charge of the Memorial is anxious to bring the matter to the attention of all physicians and surgeons who may desire thus to honor Dr. Deaver but it has no way of reaching them directly.

Very truly yours,

MYER SOLIS-COHEN, *Chairman.*

2110 Spruce Street, Philadelphia.

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PERPETUAL MEMORIAL FUND

In Honor of

DR. JOHN B. DEAVER

Surgeon Teacher Humanitarian

The Aid Association of the Philadelphia County Medical Society is establishing a special perpetual fund in honor of Dr. John B. Deaver, only the income of which will be used to afford aid to needy physicians and their families. All friends of Dr. Deaver are invited to participate. Any amount given will help in creating a fund which will be a fitting Perpetual Memorial.

The Aid Association of the Philadelphia County Medical Society

Organized, May 6, 1878

Incorporated, September 25, 1878

Dr. Charles A. E. Codman, President.
Dr. Francis Heed Adler, Secretary.
Dr. Lewis H. Adler, Jr., Vice-President.
Dr. Isadore P. Strittmatter, Treasurer.
Joseph J. Brown, Esq., Solicitor.

Directors: Dr. James M. Anders, Dr. E. John G. Beardsley, Dr. Henry E. Brown, Jr., Dr. Paul B. Cassidy, Dr. John M. Fisher, Dr. Annie B. Hall, Dr. Myer Solis-Cohen, Dr. DeForrest P. Willard, Dr. George Woodward.

All money received will be placed in the Dr. John B. Deaver Perpetual Memorial Fund. Checks should be drawn to the order of the Aid Association of the Philadelphia County Medical Society and sent to:

Dr. Francis Heed Adler, Secretary, 313 South 17th Street, Philadelphia, Pa.

## RECENT DEATHS

**SCANLAN**—MAURICE THOMAS SCANLAN, M.D., died suddenly July 2, 1932. He was born in South Boston in 1884, was a graduate of Boston College and took his M.D. degree from Tufts College Medical School in 1903. He practiced in South Boston and had been police surgeon for the last fifteen years. He joined the Massachusetts Medical Society in 1912 and, after an interval, again in 1929. He was a member of the South Boston Medical Society and Pere Marquette Council, K. of C. He is survived by his widow, a son, a daughter and four sisters.

**CARRUTH** — DR. SIDNEY RAYMOND CARRUTH of Dorchester, Mass., died June 28, 1932. Dr. Carruth was born in 1872, graduated from the University of Vermont College of Medicine and joined the Massachusetts Medical Society in 1897 and maintained an office at 19 Monadnock Street, Dorchester. He served as a volunteer in the World War.

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**HOLDEN**—CHARLES SUMNER HOLDEN, M.D., of Attleboro died July 2, 1932, after an illness of several weeks. He was born in 1856 and graduated from the Harvard University Medical School in 1883. He represented his district in the legislature for several terms and was especially interested in the public health policies of the State, having served as House Chairman of the Committee on Public Health. He was often in conference with the representatives of the Committee on Legislation of the Massachusetts Medical Society.

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DELAYED NOTICE

**ROSE**—DR. WILLIAM MILTON ROSE of Cambridge, Mass., died in that city March 24, 1932, of chronic myocarditis. He was born in Boston in 1857 and acquired his early education in seminaries in Maine. He graduated from Tufts College Medical School in 1904 and joined the Massachusetts Medical Society in the same year. He settled in Cambridge and gave especial attention to diseases of the eye and ear. In addition to membership in the Massachusetts Medical Society he was a Fellow of the American Medical Association and a member of the Cambridge Medical Improvement Society. He was a man of sterling character, popular with his associates, modest, sincere, and conscientious in the care of his patients.

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CORRECTION

Dr. William E. Synan of Fall River, the notice of whose death appeared in the *Journal* of June 23, died on June 14, 1932. He was 63 years old.

## NOTICES

WILLIAM WOOD AND COMPANY HAVE BEEN ABSORBED BY THE WILLIAMS AND WILKINS COMPANY

Announcement is made by The Williams and Wilkins Company of Baltimore of its purchase, on June 16, of the inventory assets of William Wood and Company, medical publishers of New York City. Good will and use of the Wood name and imprint is included in the purchase.

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INTERNATIONAL MEDICAL POSTGRADUATE COURSES IN BERLIN

The information bureau of the Kaiserin Friedrich-Haus, Berlin NW 7, Robert Koch-Platz 2-4 will give information relating to the above.

## NOTICE OF MEETING

### HEALTH EDUCATION INSTITUTE

The first Institute on Health Education to be conducted by the Public Health Education Section of the American Public Health Association will be held at the Hotel Willard, Washington, D. C., October 22, 23 and 24, 1932, immediately preceding the Annual Meeting of the Association, which opens Monday, October 24. The official announcement says:

The purpose of the Institute is to provide instruction in the content and methodology of Health Education to a limited number of persons actively engaged in Health Education.

The students whom it is desired to attract to the Institute, may or may not have had training in Health Education in one or the other of the very few institutions where it is available. They may have had a little or considerable experience. They may devote all their time to this work or it may be merely one of several activities. In any event, Health Education is for them a major preoccupation and they must from time to time formulate programs of activities in Health Education and carry them through.

At the Annual Meetings of the American Public Health Association there gather a large number of experienced individuals from various divisions of the public health field. The Health Education Institute is scheduled in connection with the Annual Meeting so that advantage may be taken of their presence.

The staff of the Institute is as follows:

Iago Galdston, M.D., Director
Medical Information Bureau, Academy of Medicine, New York. N. Y.

Bertrand Brown
Milbank Memorial Fund, New York, N. Y.

Evart G. Routzahn
Russell Sage Foundation, New York, N. Y.

Mary Swain Routzahn
Russell Sage Foundation, New York, N. Y.

Clair E. Turner
Massachusetts Institute of Technology, Cambridge, Mass.

W. W. Peter, M.D.
Cleanliness Institute, New York, N. Y.

Ira V. Hiscock
Yale University, New Haven, Conn.

H. E. Kleinschmidt, M.D.
National Tuberculosis Association, New York, N. Y.

George C. Ruhland, M.D.
Commissioner of Health, Syracuse, N. Y.

W. W. Bauer, M.D.
American Medical Association, Chicago, Ill.

Raymond S. Patterson, Ph.D.
John Hancock Mutual Life Insurance Company, Boston, Mass.

Active health education workers in official departments of health—state, county and city—and in voluntary agencies are invited to enroll.

Health officers and directors of health organizations are urged to send to the Institute the individuals responsible for Health Education activities in their units.

Application for enrollment in the Institute should be made on the prescribed form obtainable from the American Public Health Association.

The registration fee is $5.00 and must accompany application. Payment of fee entitles the student to all the privileges of the Institute and to private consultation with the instructors, if desired. Students, whether or not they are members of the American Public Health Association, will enjoy the special railroad rate of three-quarters of the regular round-trip fare. Checks and applications should be mailed to the American Public Health Association, 450 Seventh Avenue, New York, N. Y.

Additional information about the Health Education Institute or the Annual Meeting Program will be supplied by the

AMERICAN PUBLIC HEALTH ASSOCIATION,
450 Seventh Avenue, New York, N. Y.

### SOCIETY MEETINGS
### CONGRESSES AND CONFERENCES

**July 10 - August 12**—The Second Intensive European Summer Course in Surgery, Gynecology and Obstetrics. See page 714, issue of March 31.

**September 19-22** — International Congress of Biliary Lithiasis. See notice on page 427, issue of February 25.

**October 17-21**—Clinical Congress of the American College of Surgeons. See page 1330, issue of June 23.

**October 17-28**—The 1932 Graduate Fortnight of the New York Academy of Medicine. See page 1375, issue of June 30.

**October 22-24**—Health Education Institute. See notice elsewhere on this page.

**October 24-27** — American Public Health Association. See notice on page 1321, issue of December 31, 1931.

**October 24-28**—Inter-state Postgraduate Medical Association of North America. See page 39, issue of January 7.

## BOOK REVIEWS

*The Use of the Self.* By F. MATTHIAS ALEXANDER. New York: E. P. Dutton & Co., Inc., 1932. xix + 143 pages.

This book claims to be a new method of treating disease in that, by carefully estimating the use of the body in walking, sitting, standing and talking, Mr. Alexander finds that many people habitually make use of their motions in a harmful manner. This is especially so in patients who have suffered from a long illness and are in the convalescent stage. He writes about the "harmful pressures" that ensue when a patient fails to use his body in a scientific and constructive manner. His arguments are not convincing and one cannot hold with Professor John Dewey, who writes in his introduction that "Mr. Alexander has demonstrated a new scientific principle with respect to the control of human behaviour as important as any principle which has ever been discovered in the domain of external nature."

*Traitement du Bec-de-lièvre Unilatéral.* By PAUL PLESSIER. (Procédé du Dr. Veau.) Masson et Cie, Editeurs. Price 30 fr.

Although the author classifies the various types of hare-lip into four groups as follows: partial unilateral, complete unilateral, partial bilateral, complete bilateral, his book is solely concerned with the treatment of unilateral hare-lips, and for this, his observations are based upon operations of 205 partial and 325 complete cases, supplemented by observations of 140 patients who were operated upon by other surgeons. For purpose of discussion, the work is divided into two main phases of treatment: the lip and the nostrils.

In the first chapter, the author describes the surface and anatomy of the normal lip and nose in sufficient detail to furnish an ideal form toward which to strive when operating. In later chapters occur critical analyses of various methods including those of Mirault, Meleux-Jalaguier, Hagedorn, Blair and Brown. All these methods present certain difficulties, in the author's opinion, hence his detailed considerations of method deal almost exclusively with that advocated by Dr. Veau which he believes approaches nearer to the ideal.

To describe in detail this method is beyond the scope of this review, but a few important points are worth enumeration. First, he prefers to operate when the patient is from four to five months old. This view is at variance with the opinions of most surgeons in this country who favor earlier operation, but Dr. Veau's contention is that an operation at the later age may eliminate the need of a secondary one. Secondly, in cases of cleft palate and complete hare-lip, a good part of the discussion centers about the importance of closure of the anterior cleft by taking a flap from the vomer and reflecting it to the floor of the nose. The construction of the floor of the nose is emphasized forcefully, and considerable stress is also placed upon the reconstruction of the median tubercle of the lip by bringing forward a flap from the inner aspect of the median lip.

The book is instructive and well illustrated. It comprises 145 pages and includes many unusual diagrams and photographs of patients. It is well written, and is commended because to those who specialize in this branch of surgery or who are otherwise interested in it, it affords the opportunity for new and stimulating study on this fascinating subject.

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*Clinical Roentgen Pathology of Thoracic Lesions.* By WILLIAM H. MEYER, M.D., Professor of Roentgenology in New York Post-Graduate Medical School of Columbia University, Director of Roentgenology in the New York Post-Graduate Hospital. Published 1932. Lea & Febiger. Illustrated with 183 engravings. 272 pages. Cloth, $6.00, net.

It is the author's object to record in concise and condensed form the principles of the roentgen examination of the chest. The first section of the book is devoted to the technique of the x-ray examination of the thorax and to x-ray anatomy. The second section is devoted to roentgen pathology including tissue degeneration, vascular and circulatory changes, inflammatory and exudative changes. The third section is given over to diseases of the bony thorax. Section four covers special diseases of the respiratory system. Section five is a résumé of lesions of the heart and pericardium. Section six is devoted to the esophagus and subdiaphragmatic conditions.

This book should be welcomed by the student and general practitioner. It offers a source of concise information regarding the data obtainable by x-ray examination. The subject matter, however, is so brief that this book cannot be recommended as of great value to the specialist in roentgenology.

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## BOOKS RECEIVED FOR REVIEW

*Food and Your Body—Talks with Children* by Mary Pfaffmann and Frances Stern. Published by M. Barrows & Company. 170 Pages. Price $2.00.

*Plastic Surgery of the Nose, Ear and Face* by Dr. Victor Frühwald. Translated by Geoffrey Morey. Published by Wilhelm Maudrich. 86 Pages.

*Problèmes Actuels de Pathologie Médicale. Deuxième Série* by A. Clerc and others. Published by Masson et Cie. 340 Pages. Price 40 fr.

*Les Diagnostics Anatomo-Cliniques de P. Lecène.* 11 *Appareil Génital de la Femme. Deuxième Partie* by P. Moulonguet. Published by Masson et Cie. 380 Pages. Price 80 fr.

*Thérapeutique Médicale. IV Poumons et Tuberculose* by M. Loeper and others. Published by Masson et Cie. 380 Pages. Price 50 fr.

*Le Traitement de la Tuberculose Par L'Antigène Méthylique (Antigénothérapie)* by L. Nègre et A. Boquet. Published by Masson et Cie. 236 Pages. Price 35 fr.

*The Heart Rate* by Ernst P. Boas and Ernst F. Goldschmidt. Published by Charles C. Thomas. 166 Pages. Price $3.50.

*Medicine and The State. The Relation Between the Private and Official Practice of Medicine with Special Reference to Public Health* by Sir Arthur Newsholme. Published by George Allen & Unwin, Ltd., and Williams & Wilkins Co. 300 Pages. Price $3.50.

*A Manual of Pharmacology* by Torald Sollmann. Fourth Edition. Published by W. B. Saunders Company. 1237 Pages. Price $7.50.

*Manual of Clinical and Laboratory Technic* by Hiram B. Weiss and Raphael Isaacs. Fourth Edition. Published by W. B. Saunders Company. 117 Pages. Price $1.50.

*Minor Surgery of the Urinary Tract* by Hermon C. Bumpus, Jr. Published by W. B. Saunders Company. 124 Pages. Price $3.00.

*The Surgical Clinics of North America.* June, 1932, Volume 12, Number 3. Lahey Clinic Number. Published by W. B. Saunders Company. 299 Pages.

*Electrosurgery* by Howard A. Kelly and Grant E. Ward. Published by W. B. Saunders Company. 305 Pages. Price $7.00.